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Consolidated Paper Corp. Granted Charter

Successor Company to Canada Power & Paper Corp. and Its Subsidiary Now Incorporated In Ottawa, Ont.—L. J. Belnap Becomes First President of New Organization—Board Will Include Six Annual Class Directors and Nine Committee Class Directors—Consideration Given to Claims of Belgo-Canadian for Better Terms

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., September 7, 1931.—Formal notice has been received from Ottawa of the granting of a charter to Consolidated Paper Corporation, successor company to Canada Power and Paper Corporation and its subsidiary companies. Incorporators include L. J. Belnap, who becomes its first president, together with representatives of the Dunning committee, consisting of the Hon. C. A. Dunning (committee chairman); Norman J. Dawes, a member; Percy Thornhill as representing E. A. Macnutt of the Sun Life; and Guy M. Todd as representing J. J. Rudolf of Iselin & Co.

Wide Powers Granted

Wide powers are given under the new charter, including news print and lumbering activities, the manufacture and distribution of other wood products, extensive privileges in connection with development of electrical energy, rights to carry on mining and transportation operations, including steamships and aeroplanes. Water power rights are a natural department, as the company controls wide stretches of timber lands through watersheds. The company will also control whatever mineral content may be carried in its land holdings.

The capital structure will be substantially as already outlined. From now until the annual general meeting of 1936, the fifteen directors will be divided into two classes, six to be known as "annual class directors," representing the security holders, and the other nine members designated "Committee class directors," representing the Dunning Committee. The former class may be elected year by year, but the latter will be named for the 5-year term. Thereafter committee control will end, and the corporation carry on of itself.

Belgo's Position in the Merger

The Special Committee of stockholders of the Belgo-Canadian Paper Company has reiterated its request that holders of preferred stock withhold from depositing their certificates for exchange into shares of the new Consolidated Paper Corporation and has also notified them that further consideration may be given to their claims for better treatment. A firm of chartered accountants engaged by the Special Committee to examine the records and data submitted by the Protective Committee on which the reorganization of Canada Power and Paper was based has submitted a report which in the committee's opinion confirms the contention that Belgo preferred shareholders are entitled to more adequate compensation.

When the reorganization plans of Canada Power and Paper Corporation were announced, Belgo preferred shareholders were offered three common shares of the new company, Consolidated Paper Corporation, for each preferred share. Shareholders shortly afterwards appointed a body to investigate the award which they considered unfair.

This committee estimated that on the basis of awards as made under the Dunning plan that each of the Belgo preferred shares were entitled to $60 of the new first mortgage bonds and five shares of the new common stock. Thus while the Dunning plan would have awarded 150,000 shares of new common stock for the $5,000,000 of Belgo preferred, the special committee estimated that the stock was worth $3,000,000 of the new bonds and 250,000 shares of the new common stock.

Further pourparlers were held between the Securities Protective Committee and the Belgo preferred shareholders committee with the result that the former finally consented to allow the records on which the original award had been based to be examined by a firm of chartered accountants. The findings of the accountants are now under consideration by the Securities Protective Committee.

Thomas A. Wark Begins New Duties

CARTHAGE, N. Y., September 5, 1931.—Thomas A. Wark, recently appointed general manager for the group of mills controlled by the St. Regis Paper Company in Northern New York, has taken over his new duties. He succeeds Corwin T. Jewell, who has not yet announced his future plans. For the past few years Mr. Wark has served in a similar capacity at the Cap Madeleine division of the Canada Power & Paper Corporation and consequently is well qualified for his new position. Prior to arriving in this district he was the recipient of a number of farewell parties tendered him by friends and business associates in Canada.

Many Pennsylvania Paper Mills On Full Time

Although Increased Demand Is Mainly Confined to Requirements for Immediate Future, Manufacturers In Practically All Divisions of the Paper Industry Are More Active—Improvement Particularly Gratifying to Distributors and Mill Agents

[FROM OUR REGULAR CORRESPONDENT]

PHILADELPHIA, Pa., September 7, 1931.—With broadening of manufacture and distribution of paper of various grades in the Quaker City industry, there is general improvement in business with all sharing in the upward trend. Though this improvement is particularly gratifying among distributors of wholesale quantities and mill agents, there is less satisfaction among local associates over the fact that prices do not conform to the betterment now experienced and show revisions that are below last year's quotations for many grades of fine papers and for certain specialties. While this factor of the trading is not as gratifying among fine paper distributors, on the other hand dealers in wrapping paper and standard lines of coarser grades find brighter indications of upward trend with possible broadening of values among converted products.

Distributors of paper report wholesale buying slightly above last year at this time for finer grades, while spotty demands prevail in such lines as fancy writing papers, book papers and cover grades, with substantial orders alternating with slower business days among agents who feature these grades. Wrapping papers are likewise in spotty demand, but the week's business bulks higher according to summaries of dealers than in the same period of 1930. Merchants seek larger volume of wrapping paper while manufacturers in other industries are now more frequently purchasing hand to mouth supplies of specialties.

Local paper mills have increased production and operating schedule in the week with most of the manufacturers now on full time after a summer of part time work. The growing business extends to all manufacturers, who state that orders, while larger, are still confined to needs of the immediate future rather than for stocking to any extent for the Fall. There is cautiousness among consumers over prices and stocking, with inquiries and shopping around for prices and inducement to buy given due consideration by prospects for paper consumption in the allied trades and among consumers in other industries.

Paper Stocks on Upward Grade

Paper stocks have taken a most encouraging jump in demand and with but a single exception, that of heavy book stocks, the market values have been advanced. The mills are more willing to pay outside prices for better packings and those paper stock distributors who feature the higher grades in selected packings, have been enjoying broader business than those who make ordinary packing. It is chiefly the selected stocks that are in demand, indicating improving paper markets among the better qualities. On the whole the trade is sharing in the improved mill demand and the Philadelphia dealers state that out of town dealers also report a brighter outlook since the movement of old papers started a fortnight ago. Few of the higher grades of paper stock are to be found, as accumulations were sparse. Commoner grades, too, have been in demand after a prolonged dragginess and rock bottom prices. Rags are slightly more active.

Paper Mill Superintendents to Meet

There will be held at the Benjamin Franklin Hotel, on Saturday, September 12, a dinner session of the Pennsylvania and New Jersey Division of the American Pulp and Paper Mill Superintendents' Association. The meeting is to combine a dinner in the El Patio Grill at 6:30 P. M. and a business session to follow at 8 P. M. in the Betsy Ross Room. J. Linville Mullin, secretary and treasurer of the mill superintendents group and of the Jessup and Moore Paper Company, Wilmington, Del., has requested that members be present at this meeting for the formation of the semi-annual divisional meetings and plans for the holding of the bi-annual gathering will be "lined up." It is the desire of the officials for a generous attendance so that the program may be completed.

Paper and Twine Associations to Resume Meetings

With the closing of the vacation season the Philadelphia associates of the Paper and Twine Merchants Association will meet, in resumption of the monthly sessions, at the Adelphia Hotel, on September 18. The members will give a general review of the summer business and activities. The meeting will combine the usual luncheon session and business meeting. This organization, the only one of its kind in the country to organize both wholesalers of paper and twine, and the manufacturers' representatives in the Philadelphia territory, includes almost 100 representatives in the local trade.

A. B. Sherrill Moves Offices

Arthur B. Sherrill, one of the best known of Philadelphia fine paper associates, who has in the past been president of the local Paper Trade Association and a founder of the Paper Trade Golf Association, announced the removal of his offices to Room 222 from 226 Lafayette Building. Mr. Sherrill is Philadelphia representative of the D. M. Bare Paper Company, Roaring Springs, Pa.; Beveridge Paper Company, Indianapolis, Ind.; and the Hawthorne Paper Company, Kalamazoo, having taken over these mill agencies since his retirement from the presidency of the former Riegel Paper Company now reorganized as Paper Merchants, Inc.

Quaker City Paper Co. Outing

Members of the sales staff of the Quaker City Paper Company, one of the pioneer wrapping paper concerns of the Philadelphia trade, 303-11 Vine street, joined in a fishing cruise and outing off Cape May last Saturday and Sunday. There were five members of the sales organization including Leslie Baker, Charles Baker, W. B. Kilgour, Jr., Robert Reed, and George Geis, Jr., in the group. The members with their guest, William Edkins, president of the Philadelphia Paper and Twine Association, left the city Saturday afternoon after dining at Shoyers, and motored to Cape May, there to enjoy the shore resorts, aquatic sports, and leaving on the fishing cruise Sunday. Their total catch was eighty fish, Leslie Baker having won the laurels by capturing a 50 lb. drum, that put up a good fight and required the aid of others in the party to land.

Hooper Paper and Twine Co. Adds Fine Papers

The Hooper Paper and Twine Company, 105 Church street, has added to its recently expanded fine paper divi-

sion, the Riverdale Covers, made by the American Writing Paper Company. Another addition to its wrapping paper and specialty division is that of the Ajax Drinking Cups, which will increase the Philadelphia distribution to six firms for these sanitary products. including the J. L. N. Smythe Company, D. L. Ward Company, Sanitary Products Company, Paper Manufacturers Company, and S. Walter, Inc.

George W. Roberts in G. E. Paper Mill Division

George W. Roberts has been appointed assistant to Frank E. Winslow, manager of the Paper Mill Equipment Division of the General Electric Company, with offices at Broad and Locust streets. He was affiliated with the local office during the recent trip of Manager Winslow to Ottawa, Montreal, Quebec, and other Canadian points, on a business round of the St. Lawrence section. The new assistant will co-operate in the paper mill equipment sales of the southern territory and the East, beginning in the Pennsylvania section and along the Coast southward.

New Sectional Drive in Glatfelter Mills

The latest device in G. E. Sectional Drives has been installed for the new 190 inch, 840 feet-per-minute paper machine of the P. H. Glatfelter Paper Company, Spring Grove, Pa. and combines modern features of utmost importance to paper mill engineers. These new drives are the Selsyn Control and combine these important features for paper mill engineering:—

1. A new compensated Selsyn type of speed regulator of great simplicity and extreme sensitivity is employed, giving uniform speed of response at either high or low machine speeds. 2. By the use of Selsyn equipment, draw changes can be made from the front of the machine simply by turning a handwheel. One turn of the wheel always represents a definite change in draw. 3. All speed regulators are mounted on control panels instead of in the paper-machine room. 4. Independent generators for dryer and calender motors provide maximum flexibility in starting and operation. Dryers and calendars can be started with no disturbance of the couch. Also, any number of sections can be started simultaneously.

Included in the equipment is a G. E. waterproof push button station and draw wheel, G. E. control panel for two sections showing speed regulators and G. E. motor gear and unit for driving driver section connecting with transmitting Selsyn and cone pulleys.

Frank A. O'Neill Returns for New Plant Opening

With the return of Frank A. O'Neill, president of the Paper Manufacturers Company, Inc., 5th and Willow streets, from a summer tour of Europe, the new plant recently completed as an added gummed paper unit to the large headquarters of the company, was placed in operation. The equipment for the manufacture of gummed sealing tapes, stay papers and gummed sheets, has been completely installed and with the operation of the new units the production of these products has been doubled. The firm began manufacture of gummed products about a year and a half ago with the introduction of its Kraft-Weld and Perfection sealing tapes in a department that was perfected in its large building along the railroad at 5th and Willow. This year the new unit was constructed on a similar site adjoining the old quarters with a structure to correspond in area to the old and this was completed last month ready for operation with the return of President O'Neill from Europe. The new unit provides for the production of gummed sheets for printers, lithographers and allied graphic arts trades in colors and white and under the trade mark of "Perfection" gummed papers, recently added.

In his tour of Europe, Mr. O'Neill was accompanied by Mrs. O'Neill and their four children, two recently matriculated from college. They spent the time in England, France, Switzerland, Holland, Belgium and Italy, making the round chiefly by automobile.

W. C. Hamilton & Son's Mill on Full Time

The fine paper mills of W. C. Hamilton and Son, Miquon, near Philadelphia, have been placed on full time operation after a brief closing of one of the paper machines pending overhauling and repairs. The No. 2 machine devoted to production of fancy writing papers, has resumed and the mills are now in full swing. The paper plant has been on part time, as other mills in this section, part of the summer. The company has an improved list for fancy writing papers and other fine papers which will enable full time operation for the Fall.

Hinde & Dauch Co. Hold Sales Meeting

An Eastern sales meeting was held in Baltimore, Md., at the corrugated container plant of the Hinde and Dauch Paper Company with all local mill superintendents, executives and sales staffs attending. There were 25 associates of the company at the sales and factory inspection trip when practical education in the manufacture and construction of corrugated containers was part of the program. Officials of the Sandusky, Ohio, headquarters presided at the sales meetings. The new Baltimore plant was recently completed and is the extensive Eastern production quarters of the corrugated container division of the Hinde and Dauch Company. It was for the purpose of gaining first hand knowledge of manufacture that the sales staffs were taken over the factory.

Periodicals Affected by Canada's Tariff

MONTREAL, Que., September 7, 1931.—The Department of National Revenue has issued a partial list of the magazines upon which a Customs tariff will be levied as from September 1. The list contained nearly 450 periodicals, and additions to it are to be made when the necessary information is furnished to the Department by publishers of the publications.

Publications from Great Britain and other parts of the British Empire are not affected, and there is no provision for imposing a duty on periodical publications from trade-treaty countries. As a matter of fact the list issued covers American magazines exclusively, and it is frankly admitted that in some cases the cost will be so much increased that they will cease to be sold in Canada. This applies particularly to the short-story type of magazine.

Scientific publications, religious magazines and others devoted to comment on public and cultural affairs, and to travel and exploration which carry articles of an educational character, are listed free.

A two-cent rate is imposed on a number by reason of their advertising content, and for the same reason the rate is raised to five cents per copy on others.

Norwegian Pulp Production for June

WASHINGTON, D. C., September 8, 1931.—Pulp production in Norway during June was practically negligible, except for an output of 19,482 metric tons of ground wood, which was about half of the amount turned out during the corresponding month of last year according to a report to the Department of Commerce. Production of bleached sulphite, however, amounted to only 1,974 tons and of unbleached sulphite to 28 tons as against 11,723 tons and 9,130 tons a year ago. No production of sulphate pulp was reported for the month of June.

Wisconsin Paper Mill In Strong Position

Net Earnings of Marathon Paper Mills Co., for June Ahead of Corresponding Period Last Year—Various Plants of Company Have Been Operating At Capacity—Earnings of Northern Paper Mills Also Continue to be Quite Favorable

[FROM OUR REGULAR CORRESPONDENT]

APPLETON, Wis., September 8, 1931.—Among the highly favorable reports of earnings issued during the last week is that of the Marathon Paper Mills Company, Rothschild, Wis. The company's net for June was $77,124, as compared with $75,763 for June, 1930. Various plants of the company have been operating approximately at capacity.

Earnings of the Northern Paper Mills, Green Bay, Wis., also continue to be favorable. The board of directors has authorized payment of the regular dividend of $1.50 on the $6 preferred stock and $1.75 on the $7 preferred stock.

Great Western May Resume Operations

Possible resumption of operations at the Great Western Paper Company, Ladysmith, Wis., is seen in negotations to move the plant of the Peavey Paper and Printing Company, of Ashland, Wis., to that city. Business men of Ladysmith are back of the move, with the hope that the location of a converting plant there will provide a sales outlet for products of the mill, mostly paper napkins and novelties.

Five-Day Week Policy Approved

Interest shown throughout the state in the five-day week policy inaugurated by the Consolidated Water Power and Paper Company, Wisconsin Rapids, Wis., has elicited comment in the newspapers from George W. Mead, president, further explaining reasons for the policy.

The company recognizes the principle, said Mr. Mead, that a man who has given faithful service over a long period of time owns his job and may not be discharged from it ruthlessly just because there no longer is work enough to keep all employees on full time. The available work must be distributed.

"It must be done without wage cutting," said Mr. Mead. "We must retain a market, instead of cutting down the hourly wage and sinking in deeper and deeper. It is simply a matter of taking up the slack. I think that if things were divided justly, all the slack would be taken up."

This new plan of five days work for five days pay affects about 1,100 men in the company's four mills. The mill still operates on a six-day basis but the men are rotated so they have two days' rest out of seven. The plan has been received with general approval by the employees.

New Menasha Warehouse Nearly Ready

Concrete is being poured for the new warehouse for the Menasha Products Company, Menasha, Wis., carton division of the Marathon Paper Mills Company. The building will be ready in about thirty days and will provide about 15,000 square feet of floor space. The cost will be about $10,000.

Restraint of Trade Alleged

Paper box manufacturers of Milwaukee have been subpoenaed to appear at a hearing at Madison, Wis., before the Attorney General of Wisconsin relative to allegations of a conspiracy among them in restraint of trade. The Attorney General claims to have information that such practices have been in existence, probably as the result of complaints that have been filed, and intends to find out by cross examination and testimony if the allegations are true.

Freight Rate Increase Opposed

Wisconsin paper mills were liberally represented at the hearing conducted in Chicago last week by the Interstate Commerce Commission on the application of the railroads for a 15 per cent increase in rates. One of the speakers for the paper interests was J. R. Hafstrom, traffic manager of the Marathon Paper Mills Co., Rothschild, and Menasha, Wis. He said Wisconsin shippers already are faced with a 45 per cent increase in rates December 3rd as a result of the new western trunk line class rates under the Hoch-Smith resolution, and could not possibly stand the further 15 per cent increase.

James T. Dougherty, of Kalamazoo, Mich., representing the Michigan Paper Mills Traffic Association, said Michigan mills ship 40 per cent of their 941-ton output every eleven weeks by truck and if the increase is granted, as much of the traffic as possible would be diverted to trucks.

Pulpwood for Consolidated Arrives

Duplicating an experience of a year ago, the Consolidated Water Power and Paper Company has safely in port at Ashland, Wis., a 12,000-cord raft of pulpwood valued at $140,000 after losing it in a storm and retrieving it again. The raft was being towed across Lake Superior by two tugs of the Newaygo Tug Lines, Inc., owned by the Consolidated, bound from Port Arthur to Ashland. Strong head winds caused the tugs to lose ground for thirty miles, and the raft was on the way for two weeks when the steel cables snapped and the wood was beached near Ontanogan, Mich. The trip usually requires about seven days.

The crew of the tug *Diana* was rescued from the heaving logs by the Tug *Butterfield*. The raft was watched by the *Butterfield* until it had floated free of the navigation lanes so it would not be a menace to shipping, and the tug then made for Ashland. Its coal, food and oil were practically exhausted. With the help of a tug from Duluth, the raft was located and found practically intact, with the tug *Diana* lashed to it. The raft and tug were floated off the beach, and with weather more favorable reached port. Last year the final raft of the season was lost but most of the wood was recovered. The loading crew at Ashland will be employed until the middle of October reloading the wood on cars for the Consolidated mills.

Appleton Coated Buys Hayton Plant

Appleton Coated Paper Company, Appleton, Wis., has purchased the land and buildings formerly occupied by the Hayton Pump and Blower Company, according to real estate transactions of the week. The Hayton plant was discontinued nearly a year ago when the company sold out. The property adjoins the paper company's land and will be held for possible expansion in the future.

Goodman Joins Conservation Committee

Robert B. Goodman, of Marinette, Wis., who is interested in Wisconsin lumber companies and paper mills, has been made a member of the Wisconsin Conservation Commission by Governor Philip LaFollette, bringing to that

body the foremost exponent of reforestation in the State, and the man sponsoring legislation which has started the State on a reversal of its former ruthless destruction of timber. Mr. Goodman is working out a plan with the Governor so that forestry will be the major work of the conservation commission, and fish and game protection will be secondary. He has consented to serve until the State forestry program is worked out, including an adequate system of fire protection. Another new appointee to the commission is Brigadier General Ralph M. Immell, Adjutant General of the State of Wisconsin.

Northwestern Superintendents to Meet

Wisconsin Rapids, Wis., is making preparations to entertain the Fall meeting of the Northwestern Division of the American Pulp and Paper Superintendents Association on Friday and Saturday, October 2 and 3. Between 200 and 300 delegates are expected from Wisconsin, Minnesota and parts of Michigan and Illinois. James Simpson, of the Consolidated Water Power and Paper Company is chairman, Harold Skinner, Wausau, is vice chairman, and C. E. Jackson, also of Wisconsin Rapids, secretary.

News of the Industry

Picketing has been started at the plant of the International Wire Works, Menasha, Wis., where a strike has been in progress for several weeks. A disagreement arose over a wage scale laid down by the national committee, and the Wireworkers union therefore instituted the strike. Other weavers have been taken into the plant and four machines are in operation, which is about 75 per cent of average capacity.

D. S. Davis, of Chillicothe, Ohio, has taken the place of Arthur Bouffard as itinerant instructor of pulp and paper mill workers. Mr. Bouffard resigned recently to engage in other work. Mr. Davis is a graduate of Massachusetts Institute of Technology, and was employed successively by International Paper Company at Glens Falls, N. Y., Container Corporation of America, Manayunk, Pa., and the Mead Corporation at Chillicothe. He conducts classes in mills of the Fox River Valley under direction of the Wisconsin Board of Vocational Education.

An accident of a peculiar nature caused the death of Edward Besaw, 32 years old, last week at the Northern Paper Mills, Green Bay, Wis. He and two other mill employees entrusted with handling of the company's emergency fire equipment were on the roof of one of the buildings engaged in hose drill under directions of members of the city fire department. The three men were holding the hose awaiting water. When the water was turned on, the hose whipped, causing Besaw to lose his balance. He was some distance from the edge of the roof but stumbled, and went over the edge, falling 45 feet to his death. The pressure was only that of a storage tank.

Mrs. Frank J. Harwood, wife of the president of Appleton Woolen Mills, Appleton, Wis., died last week at Los Angeles, Cal., after an illness contracted while she was on a western trip with Mr. Harwood. One of her surviving daughters is Mrs. S. F. Shattuck, wife of the vice president of Kimberly-Clark Corporation. Mrs. Harwood's body was returned to Appleton for burial.

Sabin Robbins Buys Detroit Warehouse

DETROIT, Mich., September 8, 1931.—The Sabin Robbin Paper Company, Detroit, has purchased the National Grocery Company property at Fourteenth and Porter streets in that city. It is to be used for sales and warehouse purposes. The building has 76,000 square feet of floor space.

Geo. W. Wheelwright Paper Co. to Continue

North Leominster, Mass., Sept. 1, 1931.

Editor Paper Trade Journal.

In appointing the receivers of the Geo. W. Wheelwright Paper Co., the Court, in its decree, provided that the receivers are authorized to continue the business, "for a period not to exceed four months, without further authority from the Court".

Because of incomplete or inaccurate reports of this four month provision, the impression may have been created in the trade that the business must be liquidated during that period. Such impressions are erroneous and particularly unfortunate.

A receivership was resorted to in this matter because of the strong desire on the part of all parties concerned to preserve the valuable good will of this old, established concern which for so many years has enjoyed a high reputation, and to afford every opportunity for an orderly adjustment of its affairs as a going concern. Whether this can best be accomplished by a stockholders reorganization, the sale of the business as a going concern to other interests, or by some other means, it seems clear that the insertion of the four months provision does not necessarily establish a deadline, upon the approach of which the business must be either sold or liquidated. If at the end of four months the condition of the company's affairs is such as to render desirable a further continuance of the business, the Court would, no doubt, order such continuance. The purpose of the provision in the decree as the Court declared at the hearing was to enable the court to keep in close touch with the matter, and to require the Receivers to make a report to the court and obtain its further instructions.

In any event, so far as the manufacture and sale of the company's products are concerned, we desire to assure the Trade that the receivership will in no way affect the high standard of quality of merchandise manufactured or the promptness of deliveries, and we sincerely hope that the patronage of satisfied customers will continue.

Yours very truly,

GEO. W. WHEELWRIGHT, CARL F. WOODS, GEO. ALPERT.
Receivers of Geo. W. Wheelwright Paper Co.

Investigate Contamination in Miami River

DAYTON, Ohio, September 8, 1931.—State officials have been in the Miami Valley investigating the wholesale killing of fish life in the Miami river, near the Main street bridge in Dayton, and have reported that the contamination from the outlet near a paper mill has been the direct cause. Steps have been taken to prevent recurrence of the slaughter of fish by these means, the paper officials doing all within their power to assist the authorities.

Examination of the river water north of the outlet shows that fish life has not been contaminated, thus directly tracing the source of contamination to the refuse from the mills. While this contamination is not noticeable more than once a year, it is to be regretted, and every effort will be made to remedy conditions.

The situation in other mill communities is favorable as similar experiences in the past have led to the installation of equipment which does away with the source of contamination by effecting purification methods that have proved successful.

Paper Merchants Cancel Fall Meeting

The Fall Meeting of the National Paper Trade Association, which was to have been held in Chicago, October 5, 6 and 7, has been cancelled.

Demand for Paper Spotty In Boston

Fine Paper Market Rather Irregular, With Reports Ranging From Fair to Good—Books, Writings, Bonds and Ledgers Show Slight Improvement—Announcement Lines In Substantial Request—Wrapping Paper Situation Unchanged

[FROM OUR REGULAR CORRESPONDENT]

BOSTON, Mass., September 5, 1931—With the summer drawing to a close, the wholesale paper trade is looking forward to more activity. The market has averaged normal for the last two or three months, according to estimates. Spotty conditions have been more or less noticeable. There is confidence among at least some of the manufacturers, and new lines are being put on the market. It is understood that price reductions have been made by a prominent manufacturer of fine paper and that at least one other manufacturer is to follow suit.

The fine paper market, by and large, is holding its own, with reports ranging from "fair to rotten," to a "nice business." One house in particular received some very satisfactory orders during the week. Some houses are selling only a small volume of merchandise and others a big volume during one week and *vice versa* the next week. Individual houses have a good day, followed by a poor one. The August demand, on the whole, has been rather good, considering the season. Announcement lines, such as weddings, are in substantial demand. Books, writings, bonds and ledgers show a little improvement.

Wrapping paper is in fair demand, with prices unchanged. About the same volume of business is being transacted. Kraft is holding firm. In some instances a number of small orders are coming in but the aggregate is smaller than hoped for. The box board call is practically the same. It is rumored that prices are expected to advance in the immediate future.

Mixed Papers Stronger

The paper stock market is practically in *statu quo*, to use the words of a dealer. Most commodities are weak, although mixed papers are a bit stronger, with a little better demand. A prominent buyer's prices have not, however, changed as yet. Old kraft is firmer. There is now a good outlet for this commodity, of which holders are taking advantage. It is stated in the market that consumers are criticizing the advance and it is understood that negotiations are under way to import foreign kraft of good quality that can be sold for less money.

Consumers are talking 1.50 for manila rope, but buyers are not willing to sell at that price. The consensus of opinion is that collectors will pile up rope until the market improves. The gunny market is weak. Scrap burlap shows no increased demand. Buyers of new rags can purchase at their own prices. A well known buyer of foreign dark cottons declines to purchase any at present, because he can obtain all the domestic stock he wants at .65 delivered.

News of the Trade

Wesley W. Binford, head of the twine department of the Andrews Paper Company, has returned from a seven weeks' trip to England, Holland, Germany, Austria, Switzerland and France. While on the Continent, he talked with a visiting English twine manufacturer, who said things were very slack with him. Continental conditions are generally good, with the exception of Germany and possibly France, although in the parts of Germany he visited the mills are fairly busy. Holland seems prosperous.

A meeting of the salesmen of the Storrs and Bement Company was recently held at the office of the S. D. Warren Company, at which three new glossy coated papers being put on the market by the latter company were shown and discussed. The S. D. Warren Company have been pioneers in the manufacture of coated papers. The new lines they are now introducing embody all that could be required of a coated paper. They combine remarkable printing qualities with exceptionally strong folding middle stock. The Storrs & Bement Company have tied up with the S. D. Warren Company in advertising these lines, sending out a broadside giving stock and price information in regard to each. The broadside, printed on one of the new papers, Warren's New Cumberland Gloss, contains demonstrations of half-tone printing. The other lines are Warren's New Olympic Gloss and Warren's New New England Gloss. The first two mentioned are made in white and ivory and the last named in white only.

John Carter & Co., Inc., are putting out a new line of sulphite bond under the name of Clearwhite, which is meeting with a decidely ready reception.

Walter P. Simonds, treasurer and director of the Train Smith Company, paper stock dealers, has been elected president of the Boston, Revere Beach and Lynn Railroad, to succeed the late Gardner Wells. Mr. Simonds is a memer of the board of directors of the B. R. B. & L. R. R.

A public auction of the property of the Thompson Box Company, Cambridge, Mass., has been advertised.

On motion of George Alpert, Boston lawyer, and one of the three receivers of the George W. Wheelwright Paper Company, North Leominster and Hardwick, Mass., Judge Lummus of the Superior Court on August 28 enjoined Charles O. Johnson, collector of taxes of Hardwick, from selling the property at a tax sale scheduled for August 29 to satisfy a claim for an unpaid tax of $10,000.

W. N. Lincoln, salesman for the Spaulding & Tewksbury Company, who was married to Miss Marion Tryon, of Springfield, Mass., on August 21, left for a honeymoon trip through Maine, expecting to return in about ten days. Mr. and Mrs. Lincoln will probably live in Holbrook, Mass.

N. S. Clark, president of Knight, Allen & Clark, Inc., has returned from a two weeks' vacation at Gilmanton, N. H.

E. M. Davenport, treasurer of Spaulding & Tewksbury Company, returned from his summer vacation at Southwest Harbor, Me., September 1.

Richard S. Gilfoy, manager of the sales service department of Storrs & Bement Company, has returned from a two week's vacation at Bristol, N. H.

Arthur C. Hall, treasurer of John Carter & Co., Inc., is at his summer home, Connecticut Lakes, N. H., expecting to return early in September. Mr. Hall is a very ardent fisherman and is having his usual good luck.

John F. Kuster, treasurer of the Andrews Paper Company, expects to return to the office soon, after a vacation of about six months. Mr. Kuster has been at Lake Sunapee, N. H., since June.

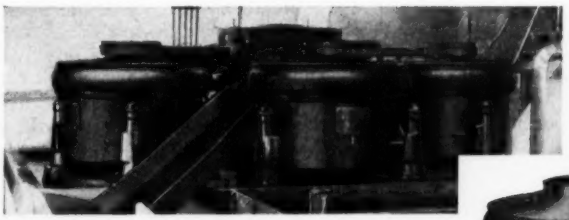
Fred Herbolzheimer and W. K. Munster have recently joined the selling staff of the Andrews Paper Company.

"FULLY Justified"

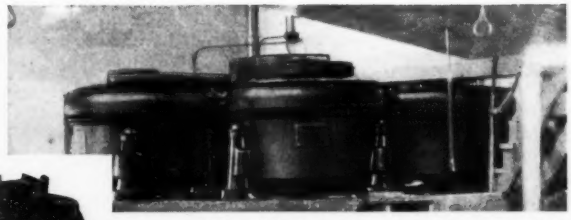
. . . that's what one paper maker has to say about his Bird Centrifiners, *after making his second installation.*

Dozens of other mills agree with him. They're getting new economies in mill operation. They're getting a strong new sales point — when they need it most.

If your customers—and prospects—like really clean paper, you will soon be considering Bird Centrifiners.



This battery of five Bird Centrifiners was so successful . . .



. . . that this second, duplicate installation was shortly supplied.

BIRD MACHINE COMPANY **SOUTH WALPOLE, MASSACHUSETTS**

manufacturers of the Bird Centrifiner under license from the Centrifugal Engineering & Patents Corp., owners of the Erkenstor Patents.

BIRD CENTRIFINERS

4989

Chicago Paper Market Continues Irregular

While Retail Paper Business Shows Slight Improvement, Gain Is Not Yet Reflected Among Mill Representatives and Distributors—Various Grades of Fine Paper Are Unusually Spotty—Kraft Wrapping Paper Stabilized Effectively

[FROM OUR REGULAR CORRESPONDENT]

CHICAGO, Ill., September 8, 1931.—The Business Survey Division of the Chicago Association of Commerce recently reported that the retail paper business had improved slightly during the past week. This slight improvement is not as yet reflected among the manufacturers representatives and jobbers who are still looking longingly for signs of the Fall upturn. Reports indicate that prices in book papers are perilously near those of grounds woods, following the drastic price cuts of a few days ago. Which leads one paper representative to say that price cutting is as tough for the man selling a different grade of paper as for the man selling the same grade that feels the price cutting. When the price goes down the paper on which the price is cut gets into or near to the price range of another paper when business finds it can get better paper for nearly the same amount of money.

Kraft papers have stabilized themselves in the Chicago market but the general trade has continued to feel the desultory summer slump despite cool weather. Board markets are slow. Fine papers are reported unusually spotty and there is very little basis upon which to base an expected upturn. Waste papers remain about the same, folded news and mixed papers reported more active than rag papers, etc. Reports indicate that while there are an unusually large number of inquiries in the various markets these inquiries have not as yet crystallized into orders—probably because the prospective buyers are themselves waiting for the upturn. August can be characterized as the low month of the depression if Chicago reports are any criterion.

Chicago Executives to Attend TAPPI Meeting

Several Chicago executives are planning to take in the annual meeting of the TAPPI which will be held in Kalamazoo, Michigan on September 24, 25 and 26. Inasmuch as the Michigan city is not so far from Chicago much interest has been aroused in the proceedings. A general symposium covering problems of deinking of waste papers and of the disposal of the deinking waste has been planned along with other events that are certain to prove of more than ordinary educational value. The three day meeting will also include a number of visits to the Kalamazoo paper mills and to other industrial plants as well.

Paper Salesmen Plan Big Golf Event

Henry Johnson of the Brown Company, chairman of the golf committee of the Middle West Division of the Salesmen's Association of the Paper Industry has released a most imposing list of prize events for the wind-up golf tournament of the group to be held at the Park Ridge Country Club, Thursday, September 17. Every effort is being made to make the event the biggest of many a year with the players competing with the New York division for the Harbison Trophy, for the *American Paper Merchant* award and for the President's trophy.

Prizes will be awarded for the following: low net 18 holes—class A and B and Class C and D; low net foursome 18 holes; low gross 18 holes; high gross foursome, 18 holes; least number of putts for the individual and for the foursome, 18 holes; blind bogey; play for the Harbison Trophy; Play for the President's trophy, and the last round of competition for the *American Paper Merchant* prize. The boys will be properly handicapped and Mr. Brown has plenty of handicap suggestions listed in his communication to the salesmen announcing the event. No handicaps over 30 will be allowed. A luncheon and the big wind-up dinner of the year will finish out the day's entertainment. The prizes won—at least the main ones—will probably be doled out at the Salesmen's Association annual luncheon held on October 5 in connection with the Fall meeting of the National Paper Trade Association, which will be held at the Hotel Stevens, October 5, 6 and 7.

News of the Trade

Copy Papers, Inc., located at 1800 West Washington street, Chicago, has been incorporated with a capitalization of $100,000. The company will make and deal in special grades of papers. P. J. Gallagher, L. J. Donohue and C. H. Krause are announced as the incorporators.

Now the Aetna Paper Company's Correct Bond is "Correct as the Salute of A Fencing Master." That is the title of the present advertising folder of the Correct Bond series issued in Chicago through Parker, Thomas & Tucker, Moser Paper Company, and the Midland Paper Company. Plenty of white space, the fencing master illustration, and a few lines of copy tieing up the illustration and the paper suffice to make up a valuable direct mail piece.

From the Chicago Paper Company, distributors of Port Huron Sulphite and Paper Company products, comes an unusually attractive three fold direct mail piece describing Port Huron Leatherette Cover. The paper is described as a slow cooked paper stock, long, strong fibers making it exceptionally strong and durable. The paper comes in grey, green, white, blue, brown, pink, black, golden rod, mandarin and oriental red and the folder contains an actual sample color chart of these ten colors.

A large majority of the Chicago members of the Middle West division of the Salesmens Association of the Paper Industry answered the call of chairman of the golf committee, Henry Johnson, and visited the Cherry Hills Golf Club course on August 21 for the fourth consecutive monthly tournament of the association. The splendid attendance enjoyed a luncheon and dinner in the evening, both of which were sandwiched in between plenty of golf—good, bad and indifferent.

Charles McKernon Dead

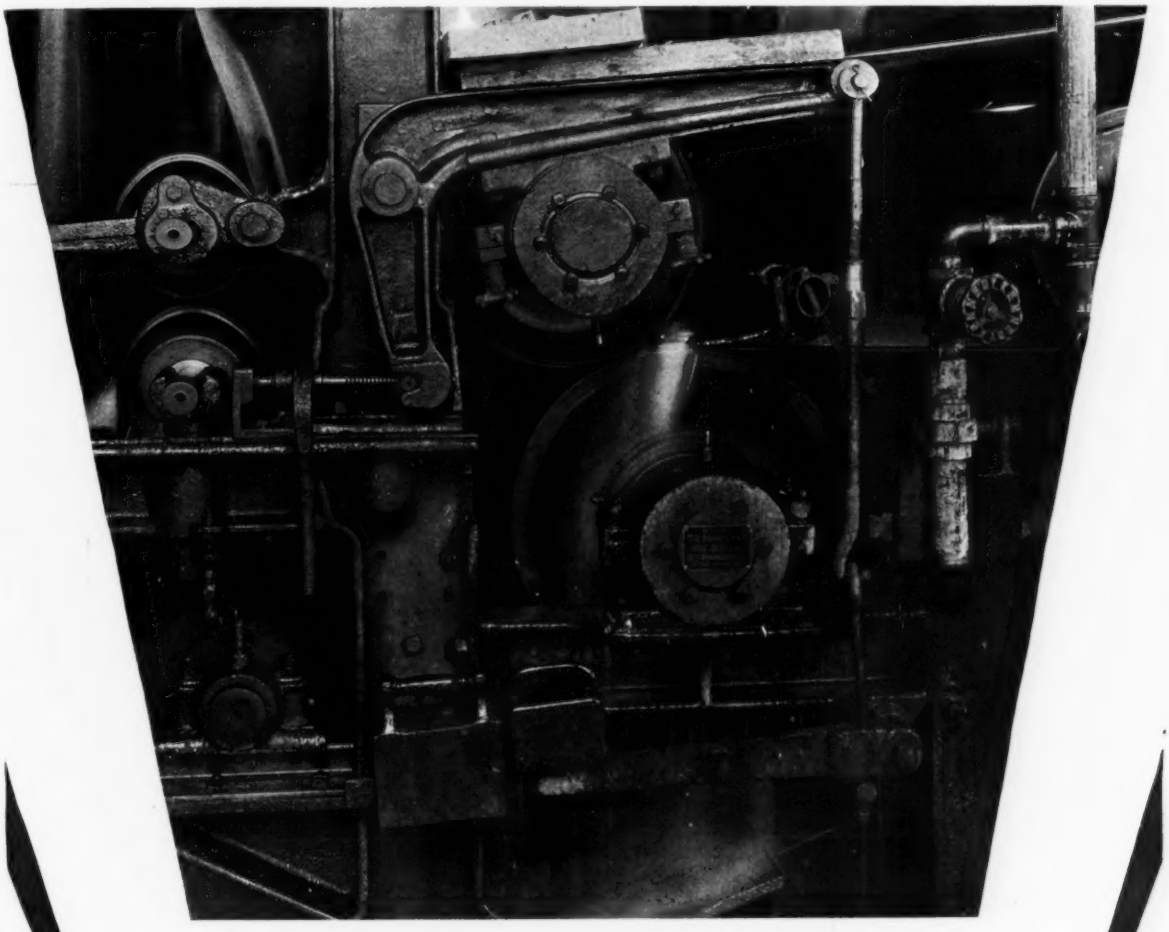
[FROM OUR REGULAR CORRESPONDENT]

CAMBRIDGE, N. Y., September 5, 1931.—Word reached here this week of the death at Pittsfield, Mass., of Charles McKernon, retired paper manufacturer, who was born in this village. Death was attributed to heart disease. He had been connected with the paper industry virtually his entire life and had gained a wide circle of friends.

Before locating in Pittsfield he was prominently connected with the Agawam Paper Co. at Mittineague, Mass. Later on he became president of the B. D. Rising Paper Co., at Housatonic, remaining in that position until a few years ago when it was taken over by the Strathmore Paper Co.

He is survived by three daughters, a brother and three sisters.

DOWNINGTOWN



EXTRACTOR ROLL

(PATENTS PENDING)

INCREASES SPEED & WIDENS TRIM

The speed of a machine making 38 point folding box board was increased 15% after the installation of a Downingtown Extractor Roll. Aside from increasing speed, in many installations the Extractor Roll has widened the trim. Either of these production increases would alone warrant the investment. The Extractor Roll removes as much as 2 to 3 lbs. of water per lb. of finished board and produces a firmer sheet with a better finish. It does not require any power and is easily installed at the end of the vat section, without rearranging other equipment. We will gladly send you actual performance facts on what various mills have saved in felts, power, steam and furnish, by installing an Extractor Roll.

The Downingtown Manufacturing Co., Downingtown, Pa.

Ontario Paper Manufacturers Fairly Active

Book Paper Mills Are Experiencing Satisfactory Demand—Plants Making Cover, Folder Stock, Bristols and Blotting Paper Have Sufficient Orders to Keep Going Nicely—Outlook for Paper Board Industry More Promising of Late

[FROM OUR REGULAR CORRESPONDENT]

TORONTO, Ont., September 7, 1931.—Both the manufacturing and distributing sections of the fine paper trade are experiencing a fair volume of business considering the protracted depression and there is little disposition to complain as to the general paper situation aside from the fact that individual orders are still inclined to be on the small size, although bulking fairly large at the close of the month. September opened up with the feeling that the closer aproach of Fall and the conclusion of the holiday season were going to increase activity in most lines of paper. Paper merchants and manufacturers are not looking for quieter conditions during the balance of the year and will be well satisfied if the concluding months of 1931 yield as much business as the eight months just closed.

Among the fine papers, book and litho appear to be in the best demand, while mills making cover, folder stock, Bristols and blotting paper have enough orders to keep them going nicely, although not at capacity.

Although things are quiet in the paper box industry the box board mills are fairly busy again, one Toronto mill having operated close to capacity during August and the other two running on a five day a week basis. The plant at Trenton, Ont., has been operating at capacity and a big Montreal plant is operating at about 75 per cent. full. It would appear as if the box board industry were beginning to find itself again. When the paper box industry gets going again with its customary vigor the board industry should undergo a small boom.

Manufacturers of light weight papers are less busy than they were a few months ago. Grease proof, glassine and waxing lines are moving fairly well and coated stock is in quite fair demand. In the coarse paper field the market is spotty, with a fair number of enquiries for stock but a pronounced shortage of orders. Demand is strong in the rag and paper stock market but supplies are light. Paper mills are using a fair amount of stock.

Abitibi Reopens Its Sault Mill

September 1 saw the reopening of the Sault Ste. Marie mill of the Abitibi Power and Paper Company. A large number of men were taken on and it is estimated that by the end of the month there will be four hundred hands on the pay roll, when production will have reached about capacity. Only former employees were taken on when the mill reopened but others will be included when the plant is ready for its full complement of men. The mill has been idle about ten months and there is considerable work to be done preparing for full operation. Some weeks ago the Ontario Government made a big drive to get the plant in operation again at the request of many delegations, during which time many conferences were held between Government, company and municipal authorities. In addition to the workmen, employment has been given to a good-sized office staff.

Forest Area Re-opened After Rain

The ban which had been placed on tourists and others entering the Mississaugua Forest Reserve in Northern Ontario has now been lifted. This step was taken because of heavy rains which lessened the fire hazard among the stands of pulpwood materially. It is stated that the hazard, although lessened, is still high enough to make it necessary for people entering the reserve to use the utmost care with fires. Much valuable timber is to be found there and the officials of the Forestry Branch are urging the utmost caution. In the Sault Ste. Marie area there are 150 men engaged in fighting fires at various points which have burned over 1,000 acres, but the situation is now believed to be pretty well under control.

Paper Exhibits at Canadian National

The paper industry of Canada was well represented during the two weeks of the Canadian National Exhibition in Toronto, chiefly by distributors and mill representatives. Probably the most pretentious display was that of the Interlake Tissue Mills, which company had an elaborately decorated booth with a number of ladies demonstrating the many uses tissues and fancy crepes can be put to for decorative purposes. The C. V. Syrett Paper Company, Toronto, had an attractive booth exhibiting their coarse paper lines, such as wrapping and kraft papers, and twines. The W. J. Gage Company, Toronto, had a fine layout of their manufactured stationery lines and the Denison Manufacturing Company showed light weight paper lines. The Perkins Tissue Mills, Montreal, had an attractively decorated booth and in addition sent over their travelling advertising van, steam caliope and all. The E. B. Eddy Company was also a prominent exhibitor and displays of wall papers were made by Stauntons, Ltd., and Reg. N. Boxer Company, Ltd. International Fibre Board Company, Ltd., showed a number of their lines in the Construction Building.

Paper Towels for the Kitchen

An unusual and striking exhibit was that of Onilwon paper towels, manufactured by the E. B. Eddy Company. In one booth they presented a model kitchen and illustrated the wall cabinets which contain the towels. The cabinets were shown in various colors to match the kitchen surroundings and a demonstration was given as to the infinite variety of uses to which the paper towels can be advantageously put, in addition to the sanitary replacement of the old towel. In another section of the company's display they illustrated the actual making of a sheet of paper. A miniature beater and other laboratory equipment showed the paper fibers in the various stages or processes whereby they become a finished sheet of paper. Well posted demonstrators explained the intricacies of the paper making game and the various methods of grading and testing for strength, weight, absorption and other qualities.

Pulp Workers Discuss 6-Hour Shift

A six-hour day for workers at the paper mills in Sault Ste. Marie, Ont., is being considered by the members of the Pulp Workers' Union, according to a statement made at the Sault by a member of the body. The Union held a meeting a few days ago at which the matter was discussed and a verdict will be reached in a few days. The consideration of the six-hour day by the Union resulted from a suggestion by the mill manager, C. O. Sisler. "We

USS STAINLESS AND Heat Resisting ALLOY STEELS

[U S S Chromium-Nickel Alloy Steels are produced under the licenses of the Chemical Foundation, Inc., New York; and Fried. Krupp A. G. of Germany.]

NATIONAL PIPE and TUBES

U S S Chromium and Chrome-Nickel Stainless and Heat Resisting Steel Tubes are important contributions to the

PAPER FIELD

This material includes all the usual qualities of a high grade seamless pipe or tube and in addition the advantages of unusal corrosion resisting properties, improved strength at high temperatures, and protection from certain acids.

Upon request, information regarding this highly adaptable and superior tubular material will be gladly furnished and suggestions made as to the application of these tubes for your purpose.

U S S 18-8 CHROME-NICKEL—U S S 17 CHROMIUM
U S S 12 CHROMIUM

USS STEEL

NATIONAL TUBE COMPANY
Frick Building, Pittsburgh, Pa.

QUALITY PRODUCTS — Dependable Service

SUBSIDIARY OF UNITED STATES STEEL CORPORATION

PRINCIPAL SUBSIDIARY MANUFACTURING COMPANIES

American Bridge Company
American Sheet and Tin Plate Company
American Steel and Wire Company
Carnegie Steel Company
Columbia Steel Company
Cyclone Fence Company
Federal Shipbuilding and Dry Dock Company
Illinois Steel Company
Minnesota Steel Company
National Tube Company
Oil Well Supply Company
The Lorain Steel Company
Tennessee Coal, Iron & R. R. Company
Universal Atlas Cement Company

Pacific Coast Distributors—Columbia Steel Company, Russ Building, San Francisco, Calif. *Export Distributors*—United States Steel Products Company, 30 Church Street, New York, N. Y.

thought that the plan would help to relieve the unemployment situation in the city considerably," he said. "There are only certain departments of the mill to which the six-hour day could apply. We are not sure yet just how many more men we can take on."

Notes and Jottings of the Trade

Notice has been issued by the Trusts and Guarantee Company, Toronto, trustee for the 6 per cent. bonds of Interlake Tissue Mills, Ltd., Thorold, Ont., due 1935, that $50,000 of the bonds have been called for redemption February 1, 1932. The notice contains a list of the numbers of the bonds which have been drawn by lot. As at December 31, 1930, the outstanding bonds amounted to $175,000. In accordance with the provisions of the trust deed, the bonds are being redeemed at a premium of 1 per cent.

W. H. Smith, assistant managing director of the Abitibi Power and Paper Company, is holidaying in Muskaka, while F. T. Mitchell, of the woods operations department, and J. J. Bruncke, chief engineer of the same company, are spending a few weeks at Jackson's Point on Lake Simcoe. L. H. Chipman, purchasing agent of the company, has returned from a holiday spent in Vermont.

Beverley Macguire, of the sales staff of Provincial Paper, Ltd., Toronto, is spending a couple of weeks at a summer cottage on Lake Simcoe.

Q. A. Hutchison, vice-president of Dominion Boxboards, Ltd., has sailed on a short visit to Europe.

V. T. Haney, in charge of Ontario sales for the Rolland Paper Company, Montreal, has returned after a vacation spent on the Maine Coast.

George H. Alle, vice-president of the Bunton Reid Company, Ltd., Toronto, has returned after a holiday spent in Muskoka.

Bond Paper in Pastel Shades

After witnessing the growth in popularity of soft, subdued colors, the Whiting-Plover Paper Company of Stevens Point, Wis., has determined to capitalize on it with bond paper in pastel shades. This company's Redemption bond is now being made in five new colors—fern, peach, melon, sapphire and lavender.

Investigation by Whiting-Plover revealed these shades as the most popular and practical among those classified as pastel. Manufacturers of men's shirts and ties are using them, so are the makers of office furnishings, of paints, of equipment for the home—and of many other products.

Samples of bond paper in pastels have aroused much interest, officials say. Paper users who employ a variety of colors in their letterheads see an opportunity for more attractive ensembles. Others plan to use the new shades to meet special needs in paper stock.

The new colors are now available and it is understood that the company plans to appoint additional distributors in some territories. Whiting-Plover is well known as the manufacturer of Artesian Bond.

F. C. Huyck Report Improvement

RENSSELAER, N. Y., September 8, 1931.—Improvement in business at the mills of F. C. Huyck & Sons has resulted in dispensing with the annual custom of closing down during the first two weeks of this month. It was announced, however, that a portion of the working force will be permitted to take their vacation this week and the remainder the following week. Orders for immediate delivery were largely instrumental for the decision to keep the plant in operation. The company is observing full time schedules in all departments.

Better Demand in Indianapolis

[FROM OUR REGULAR CORRESPONDENT]

INDIANAPOLIS, Ind., September 8, 1931.—Some leaders in the trade here profess to see a slightly better demand for paper and paper products in this area. The opening of the school season today and cooler weather have done much to aid business, though it is doubtful if the volume being sold is any greater than it was this time last year. Demand for fine paper has improved, of course, with the opening of the school year. Most of the dealers bought as sparingly as possible and after the first rush will be compelled to re-enter the market to build their stocks.

An increase also is noted in the demand for wrapping paper and bags of the higher class. The approach of the fall season has had its effect here also. The large department stores and specialty shops are buying steadily now with school commencing and the college season only two weeks away.

The cooler weather, coupled with heavy rainfall, did much to curtail the demand for containers and paper plates and summer specialties. The ice cream trade fell off and is likely not to be so good from now on as it was during the summer. The trade should have little complaint, however, since the past summer, with its periods of intense heat was one of the best in recent years in spite of depression and what not.

Just now there is some demand from the manufacturers of greeting cards who are getting ready for Thanksgiving and Christmas. It is too early to determine just how much the demand may be, but it should be on a par with last year at least.

Manufacturers of bread wrappers report a good business, with prospects for more business after school starts. Plants are running almost to capacity and in some instances 24 hours a day, which is little short of remarkable for these times. Makers of corrugated board report a gradual increase in demand. The increase is limited but it is plainly noticeable. They are not putting any more men to work however. Paper stock men report a dead market, and they are buying only in small quantities, their warehouses being full now.

Future of Paper Industry in New York

[FROM OUR REGULAR CORRESPONDENT]

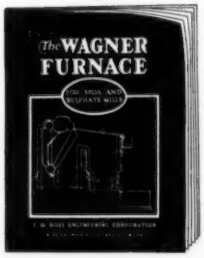
CARTHAGE, N. Y., September 8, 1931.—A meeting of the Rotary Club was held here this week at which an address on the future of the paper industry in Northern New York was delivered by John Murray, widely known paper mill man of this village. He is regarded as an authority on matters pertaining to the manufacture of paper. It is his opinion that the paper industry like many another business in the world today is at present hanging under heavy clouds which he attributes not to over-production but under-consumption. He declared that exports in the business have fallen off but feels that the future of the industry in Northern New York is assured as long as the pulpwood supply is obtainable. He contends also that the paper manufacturing business is responsible principally for the growth of many of our villages and cities while these communities rely upon this vast industry for support and commercial assistance.

Mr. Murray produced maps which illustrated the wooded areas of Canada. "The entire northern part of New Brunswick is solid forest," he said, "and the rivers there are navigable. There will be 300,000,000 cords of pulpwood available from that section. There seems now no danger for the maintenance of our paper mills because so many new uses are being found for paper every day. I even predict that in the course of time even our homes will be constructed out of paper in one form or another."

The ROSS-WAGNER FURNACE

recovers chemicals and heat in processing of sulphate and soda pulp

In the soda process, the Ross-Wagner Furnace takes the place of the rotary and firepot, ash conveying apparatus and leachers. In the sulphate process it eliminates the need for disc evaporators, rotaries and smelters. It not only returns the chemicals for re-use in the most available form without requiring extra fuel but it also cuts down excessive waste of heat and labor and eliminates dirt, smoke and odors. The value of its combined advantages accounts for the fact that on nearly half a million tons of pulp per year, the chemical recovery is now being handled by these modern Ross-Wagner units.



Completely Described In This 24 PAGE BOOK

Profusely illustrated and containing data, and tables that clearly explain the economic advantages to be secured from operation of the Ross-Wagner System.

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ROSS ENGINEERING OF CANADA, LIMITED
NEW BIRKS BLDG., MONTREAL

ROSS SYSTEMS
HEATING—VENTILATING—DRYING

Oswegatchie Bought by Bondholders

[FROM OUR REGULAR CORRESPONDENT]

LOWVILLE, N. Y., September 5, 1931.—At an auction sale here this week the property of the Oswegatchie Paper Company was bid in by Attorney Samuel Child, representing the first mortgage bondholders, for $63,500 subject to the mortgages against it. The property is estimated to be worth about $3,000,000. The sale was conducted by Robert E. Wilcox, referee, in order to satisfy a mortgage foreclosure judgment taken by the Watertown National Bank as bondholders' trustee. The judgment covering total liabilities amounts to about $1,900,000, including $598,000 of outstanding first mortgage bonds and about $900,000 of second and refunding mortgage bonds. A lien of about $45,000 representing amounts advanced on the property is held by the bank, of which $23,000 was for taxes, $10,000 for insurance and about $11,000 for maintenance expenses. There are also several other judgments against the paper company.

The bondholders' committee is composed of Samuel Child, chairman; Charles W. Valentine, president of the Bagley & Sewall Company; Ivan J. Gotham and Harry M. Goulding, prominent business men of Watertown, and Nelson R. Caswell, of Gouverneur. Mr. Caswell was at one time the controlling factor in the paper company and is said to be the largest individual bondholder.

A large crowd attended the sale and the bidding was started with an offer from Mr. Child for $50,000. Among the others participating in the competitive bidding were Henry H. Babcock, of the Watertown National Bank, and George Caswell. A final bid for $63,500 from Mr. Child was accepted but it is said that this represents about ten per cent of the amount of the first mortgage bonds. The property consists of a modern paper mill which was built a few years ago and is well equipped with machinery; a ground wood mill at Emeryville and extensive timber holdings in the Northern New York counties. Both mills control extensive power resources. Samuel B. Wardwell was the president and general manager of the company until operations were suspended about two years ago and his brother, A. F. Wardwell, is understood to have owned considerable stock.

No announcement has yet been made as to the disposition to be made of the property but it is probable that some form of reorganization will be made in order to place the mills in operation. It is understood that a grade of paper in good demand will be produced if the mills resume operation in the near future which appears more than likely as a means of clearing maintenance charges, taxes, insurance, and other expenses that are bound to keep mounting. The reopening of the mills would also help to keep it in good condition until such time as it could be disposed of advantageously or at a fair profit. The mill is said to have a capacity of about 60 tons daily and was operated steadily until the demand for its product declined.

Wheelwright Co. Claims Flood Damages

[FROM OUR REGULAR CORRESPONDENT]

BOSTON, Mass., September 8, 1931.—George Alpert, a Boston attorney, in his capacity as a co-receiver of the George W. Wheelwright Paper Company, of Wheelwright in the town of Hardwick, Mass., has petitioned the Superior Court for the right of himself and associates, George W. Wheelwright and Carl F. Woods, to bring suit against the Commonwealth to recover for the diversion of the flood waters of Ware River. He states that the company should receive substantial damages. Mr. Alpert informs the court in his petition that on March 6, last, the Metropolitan Water Supply Commission, purporting to act under Acts of 1926 and 1927, made a taking of the flood waters of the Ware river and on March 20 made its first actual diversion of the waters. He asserts that it is the opinion of the receivers that the company is entitled to damages for the taking.

On petition of the receivers, the George W. Wheelwright Paper Company is authorized by the Superior Court to purchase on credit materials necessary for carrying on the business up to $100,000. The receivers pointed out to Judge Lummus in the motion Equity Session that the $30,000 which they were permitted to borrow under the original decree was inadequate as the company had little or no cash on hand. They anticipate gross sales of about $140,000 monthly for the next four months. The $100,000 is in addition to the $30,000 cash which may be borrowed. The company sells its paper on 3 per cent discount, 30 days or payments if not discounted are "expected" in 45 days. This tends to keep back receipt of cash with collections slow at this time.

Creditors whose counsel have filed appearances for them in the Receivership Case include: Gatti Paper Stock Corporation, James J. Graham Paper Company, E. Butterworth & Co., Inc., New England Paper & Pulp Traffic Association, North American Coal Corporation, John Richardson Company, First National Bank of Boston, Leominster Electric Light and Power Company, Rosenberg Bros. and Merrimac Chemical Company.

I. P. of Newfoundland Earnings Up

International Power and Paper Company of Newfoundland, Limited, a division of International Paper and Power Company, for the six months ended June 30, 1931, reports gross sales of $4,301,751 compared with $4,230,808 for the corresponding period of 1930; net revenue of $1,519,468 compared with $1,364,479; and balance added to surplus of $402,840 compared with $182,658.

This is an increase of 10 per cent in net revenue, including other income, available for interest and reserves, for the first six months of 1931 despite the effect (retroactive to January 1) on 1931 earnings of the $5 per ton cut in news print prices announced in April. There has been a steady increase in mill operating efficiency and large savings in fuel costs have been made possible by the installation of 58,000 horsepower additional generating capacity at the Deer Lake hydro-electric plant. This installation was made at exceptionally low capital cost—only slightly over $28 per horsepower.

Net revenue, including other income, from the first six months of 1931 was at the rate of almost thirteen times annual interest requirements on the first mortgage bonds before depreciation and depletion, and ten times after depreciation and depletion.

J. & J. Rogers Co. Elects Officers

[FROM OUR REGULAR CORRESPONDENT]

AUSABLE FORKS, N. Y., September 8, 1931.—Directors and officers for the next year were chosen this week at the annual meeting of the J. & J. Rogers Company at the offices of the concern in this village. Those elected to the board of directors included George Chahoon, I. H. Chahoon, H. G. Rogers, E. C. D. Cameron, George Chahoon, Jr., James Rogers and Robert Caldwell. At a subsequent meeting of directors the following officers were chosen: George Chahoon, president; I. H. Chahoon, vice president; H. G. Rogers, vice president; E. C. D. Cameron, secretary and treasurer. Mr. Cameron succeeds the late Frank Kemp, who served as secretary for many years prior to his death recently.

GOOD NEWS FOR BEATERS

this new THOR *Belt saves drive belt troubles*

THERE'S a quick and lasting remedy for belting trouble on beaters. Just put on a Goodyear THOR Transmission Belt in the new seamless construction.

A heavy envelope completely covers the belt. Because there is no central seam, there is no place for the severe shocks of beater loads to start rips. The edges are protected by the envelope from fray. THOR is made of silver duck. It is very strong at the fasteners. The strong flexible plies are toughly bound together with rubber. THOR will stay at work for you on beater drives after other belts have failed. Its unusual freedom from stretch, fray, and ply separation cut belting costs to a minimum.

Let the G.T.M.—Goodyear Technical Man—study the drives in your plant. He will specify for each one the proper Goodyear Belt for greatest power and savings. He can help with Hose and Packing. Just write to Goodyear, Akron, O., or Los Angeles, Calif., and ask him to call.

THE GREATEST NAME IN RUBBER

GOODYEAR

BELTS • MOLDED GOODS • HOSE • PACKING

New York Trade Jottings

Regular weekly luncheons and meetings of the Eastern Division of the Salesmen's Association of the Paper Industry will be resumed next Tuesday, September 15, at George's Restaurant, New York.

* * *

Challenger Paper Box Company has been chartered under the laws of the State of New York with a capital stock of $20,000. S. W. Smith, of 41 Union Square, New York, was the attorney.

* * *

William F. Ebner has joined the staff of Darmstadt, Scott & Courtney, Inc., dealers in paper mill supplies, of 150 Nassau street, New York. He was formerly connected with the New York branch of E. Butterworth & Co., for fourteen years.

* * *

The United Paperboard Company, Inc., New York, for the year ended May 30, 1931, reported a net loss of $343,500 after expenses, inventory adjustments, depreciation, etc., compared with a net profit of $3,115 in the preceding fiscal year.

* * *

Friends of Thomas J. Burke, of the American Paper and Pulp Association, are congratulating him upon the fact that his younger son has been awarded a scholarship at the Hotchkiss School, Lakeville, Conn., and will return there this Fall with his brother, who also obtained a scholarship.

* * *

The F. Giove & D'Arecca Company, packers of waste paper, of 557 Water street, New York, has been awarded the contract for the removal of waste paper accumulations for one year, commencing September 1, from the United States Customs House and the United States Barge Office in New York and the United States Court House and Post Office Building in Brooklyn. A total of five waste paper concerns made bids on the contract.

* * *

Castle & Overton, Inc., importers of and dealers in wood pulp, rag stock and other paper mill supplies, with offices at 200 Fifth Avenue, New York, announce the acquisition of Joseph H. Dow, formerly sales manager of the wire department of the Eastwood Wire Corporation, who has now been appointed sales manager of the wire department of Castle & Overton. New price lists on Fourdrinier wires and cylinder cloth have just been issued by Castle & Overton.

* * *

Daniel M. Hicks, Inc., dealers in paper mill supplies, of 200 Fifth Avenue, New York, announce the disposal of their interest in the Hicks-Costarino Company, Inc., of Brooklyn, N. Y., and the resignation of Leonard F. Hicks from the former corporation. It is stated that the activities of Daniel M. Hicks, Inc., in waste paper and other paper making materials, will continue with strict supervision, as heretofore, and that the organization will continue to serve its paper mill clients as in the past.

* * *

Announcement was made by Hicks-Costarino Company, Inc., packers and dealers in waste paper and rags for paper mill consumption at their main office and warehouse, 696-707 Kent Avenue, Brooklyn, N. Y., that they have purchased the interest in Hicks-Costarino Company, Inc., formerly owned by Daniel M. Hicks, Inc. Further announcement was made that Leonard F. Hicks, formerly vice-president of Daniel M. Hicks, Inc., and vice-president of Hicks-Costarino Company, Inc., has resigned from the former concern and will continue, utilizing his entire time, as vice-president of Hicks-Costarino Company, Inc. Mr. Hicks will continue to handle the sales end of the company and the importation of raw materials for paper making that he has formerly sold his paper mill friends. Hicks Costarino Company, Inc. will, therefore, sell all of their products direct.

I. P. Acquires Seminole Paper Co.

Richard J. Cullen, vice-president of International Paper Company, announces the acquisition of Seminole Paper Company, a large distributor of toilet paper with headquarters in Chicago. For many years International Paper Company has been a manufacturer of this grade of paper and the addition of the Seminole Paper Company to its organization marks a further development in its marketing activities in that field.

Seminole Paper Company, of which Mr. Cullen is the new president, is completing plans for an intensive marketing campaign for Seminole tissue. This brand, already well established in Chicago and other parts of the middle west, will be introduced into other sections of the country with the assistance of newspaper advertising. Seminole tissue is now being made at the International's present tissue mills at Marinette, Wis., Ashland, N. H., and Rumford, Maine.

In acquiring Seminole Paper Company and in developing the toilet paper field, International Paper Company is following its policy of diversification of products. Among the other manufactures of the company are news print and kraft paper, sulphite bond and book papers, rotogravure, hanging, catalogue, and other ground wood grades, wrapping, paper for grocery bags, for cement sacks, for United States Government envelopes, and for many other purposes including tissue paper and towelling. Pulp capacity includes soda pulp, kraft pulp, and sulphite pulp for the manufacture of rayon. Among the other products of the company are mulch paper and veldown.

Mrs. M. A. Curtis Dead

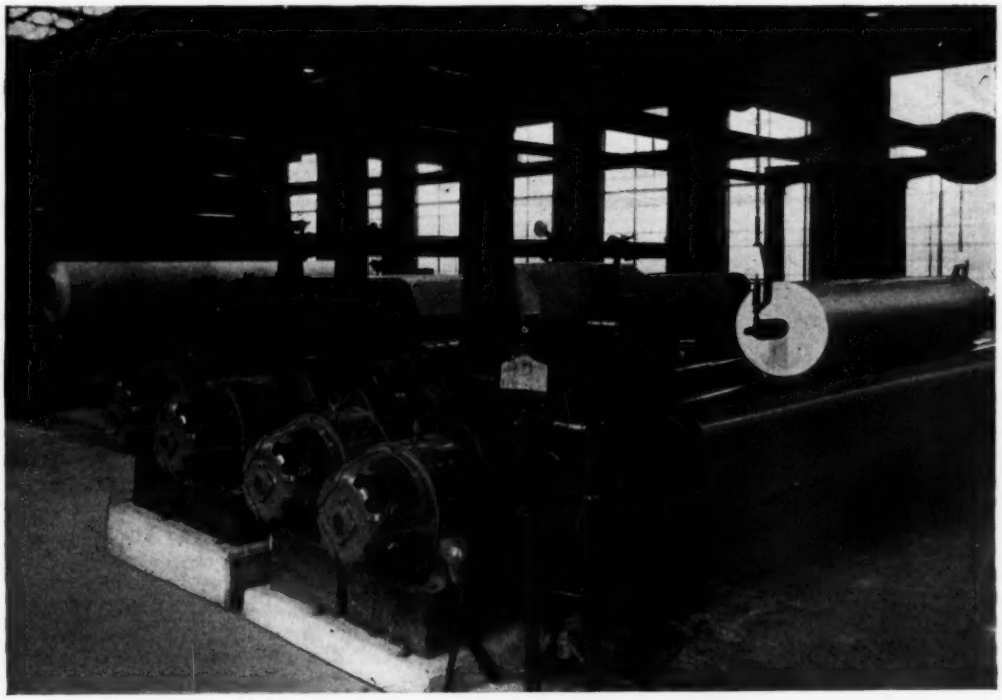
CORINTH, N. Y., September 2, 1931.—Having been in a critical condition for about two weeks, since she fell at her home and fractured her right hip, Mrs. Margaret A. Curtis, widow of the late Warren Curtis, founder of the paper industry in Corinth, died at 8:10 o'clock last night at her home in Palmer Avenue. Mrs. Curtis, who was a life-long resident of the village and affiliated prominently with the Baptist church, was before her marriage Miss Margaret A. Parmenter.

Her husband built the paper plant, now occupied by the International Paper Company, which is one of the first paper mills constructed on the Hudson river north of Albany. He also built the power plant, now owned by the International Paper Company.

The survivors are two daughters, Mrs. C. H. Yates and Mrs. William A. Bensel of White Plains; and one son.

To Build Lime Slacking Tanks at Salem

The contract for the design and construction of concrete lime slacking and sledge tanks at Salem, Ore. has been awarded The Austin Company, engineers and builders of Cleveland, by the Oregon Pulp and Paper Company. The project represents an investment of $35,000 and will be under the supervision of the Portland office of The Austin Company. F. W. Leadbetter is president of the Oregon Pulp and Paper Company.



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Ordered by Mead Straw Pulp Co., Chillicothe, Ohio.
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USE "M & W" FOUR-DRUM WINDERS

and wind the kind of rolls that your customers prefer.

Catalog just off the press describes them fully. Send for it today.

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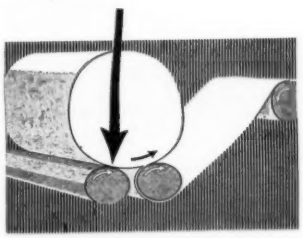

Definite, Dominant Winding Efficiency

A HARD roll centre for safe handling—Slightly *decreasing* hardness toward the outside, to prevent shrinking and welting in the customer's hands—

And this slight decrease accomplished *automatically,* by the nature of the drive itself, instead of by frequent skilled manipulation—

That is the everyday service which the users of M & W electrically-driven Four-drum Winders have learned to expect. They just start the rolls going, and the Winder "runs itself."

The saving in labor, and the gain in quality of product, will be appreciated by every mill superintendent.

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PAPER MACHINE BUILDERS

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CONSTRUCTION NEWS

A Summary of Vital Facts Regarding Construction, Finances and Operation of Paper Mills

Construction News

Danvers, Mass.—The Friend Box Company, Endicott street, Salem, Mass., manufacturer of cardboard boxes and containers, has concluded arrangements for purchase of the former factory of the American Toy Company, High street, Danvers, and will occupy for a new plant. Equipment will be installed at once and operations placed under way for substantial capacity.

New York, N. Y.—The Challenger Paper Box Company, Inc., recently organized with capital of $20,000, by Samuel Druckman, 786 Monroe street, Brooklyn N. Y., and associates, plans operation of a local plant for manufacture of paper boxes and containers. Hyman Gromick, 846 Hewett Place, Bronx, New York, is interested in the new company.

Atlanta, Ga.—The Gaylord Container Company, 229 Grant street, S.E., manufacturer of paper boxes and containers, is pushing construction on new plant unit on Blashfield street, Atlanta, for which contract recently was let to Gilbert Beers, Bona Allen Building, Atlanta, and proposes to have the structure ready for service at an early date. It will be one-story, 200x220 feet, with adjoining one-story unit, 26x50 feet, for office and operating service. The steam department will include the installation of a new gas-fired blast type high pressure steam boiler, using natural gas as fuel. The plant is reported to cost over $75,000, with equipment.

Aurora, Ill.—Miller, Bryant, Pierce & Co., 223 South River street, manufacturers of carbon papers, etc., are said to have plans maturing for their proposed new plant addition, for which bids were asked on general contract a number of weeks ago and project held in abeyance since that time. The structure will be three-story, located to the side of present factory, which will be increased by a fourth or top story. Entire project will cost over $85,000. Increased capacity will be arranged. S. E. Miller is president. Frank D. Chase, Inc., 720 North Michigan avenue, Chicago, Ill., is architect and engineer, in charge.

Chicago, Ill.—International Paper Company, 220 East 42nd street New York, has concluded arrangements for the acquisition of the Seminole Company, 535 West 14th street, Chicago, dealer and distributor of toilet tissue stocks made by the purchasing company. The International company will continue operation of the Seminole Company at the present location as a subsidiary organization, primarily for marketing service. The tissue stocks of the Seminole Company are produced at the International mills at Marinette, Wis., Rumford, Me., and Ashland, N. H., and output will be continued at these mills as heretofore. Richard J. Cullen vice-president of the International company, has been elected president of the Seminole organization.

North Wilbraham, Mass.—The Collins Manufacturing Company, Suffolk street, Holyoke, Mass., has asked bids on general contract for construction of proposed new power plant at its mill at North Wilbraham, previously referred to in these columns, and is expected to award general contract at an early date. It is estimated to cost close to $50,000, with power equipment. McClintock & Craig, 458 Bridge street, Springfield, Mass., are architects and engineers.

New Cumberland, Pa.—The New Cumberland Paper Box Company, First avenue, is running on a full time production schedule and is said to have received some large orders, insuring continuance of output on the present basis for an indefinite period.

Hardwick, Mass.—The three receivers for the George W. Wheelwright Paper Company, Leominster and Wheelwright, Mass., secured authority from the Superior Court, August 28, to prevent the sale of the mill of the company on the day following by Charles O. Johnson, collector of taxes, who had scheduled a tax sale at that time. The three receivers, George Alpert, George W. Wheelwright and Carl F. Woods, will continue in possession of the property and assets, as heretofore.

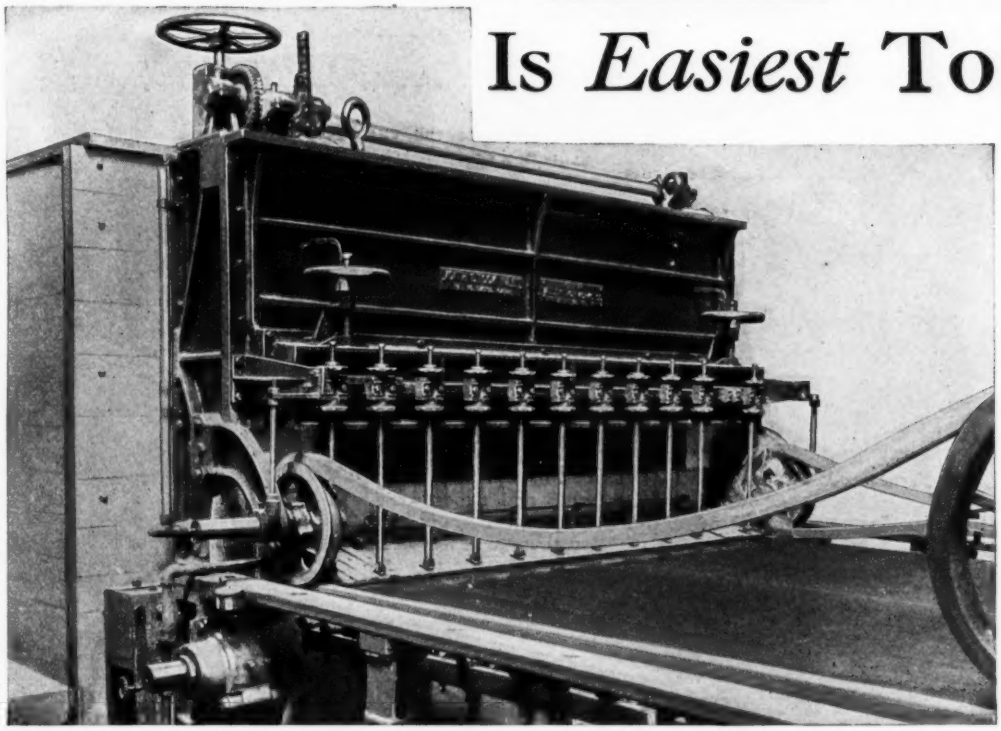
Salem, Ore.—The Oregon Pulp and Paper Company, Salem, will carry out an expansion and improvement program in its lime division, and has awarded a contract to the Austin Company, Euclid avenue, Cleveland, Ohio, for the construction of new concrete lime slacking and sledge tanks, estimated to cost about $35,000. Work will be placed under way at once.

Detroit, Mich.—The Sabin Robbins Paper Company, 115 McKinstry street, Detroit, dealer and distributor of coated paper stocks, etc., has arranged for the purchase of the building at 14th and Porter streets, heretofore occupied by the National Grocery Company, and will use for expansion. The structure is three-story, brick, totaling about 76,000 square feet of floor space. Interior improvements will be made and present plant will be removed to the new location gradually, where considerable increase in capacity will be provided. It is expected to have the removal completed, including offices, in October. The company recently acquired a building in Chicago, Ill., and is now occupying for a storage and distributing plant in that city. General offices are maintained at Cincinnati, Ohio. D. W. Whitelaw is vice-president and division manager at Detroit.

Sault Ste. Marie, Ont.—The Abitibi Power and Paper Company, Toronto, has resumed operations at its news print mill at Sault Ste. Marie, which has been closed down since last November. Two of the four paper-making machines are now in service, with sizable working force, and will be continued for an indefinite period; it is expected to add a third machine to the active list during September, when further additions will be made in the working quota.

Montreal, Que.—The Consolidated Paper Corporation

When A Good Sheet Is *Easiest* To Sell



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A GOOD sheet is easiest to sell when it is *attractively priced.*

And the only way a good sheet can be made attractively priced is with up-to-the-minute, modern machinery.

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Efficient, low-cost equipment is more necessary now than ever before. In fact, only such equipment can hope to successfully meet present conditions.

If your slices are not all you know they should be —now is the time to make changes. Now is the time the resulting advantages can be of *greatest benefit* to you.

Tell us about your needs. The practical experience we have acquired from over 300 diversified inlet installations is at your disposal.

Beaters • Jordans • Stock Inlets • Pumps • Deckers
Screw Presses • Laboratory Equipment • Plug Valves • Stock Regulator

has been formed under Canadian laws to take over the mills and assets of the Canada Power and Paper Corporation, Montreal, with main operating offices at Three Rivers, Que. The new corporation will carry out complete reorganization plans for the former company, with L. J. Belnap as president.

New Companies, Etc.

Chicago, Ill.—State Fiber Company, 1820 West 14th street, has been incorporated with a nominal capital of $5,000, to deal in fiber products. The incorporators are E. Borkan, and N. S. Caplow. Company will be represented by Maurice L. Davine, 228 North La Salle street, attorney.

Lansing, Mich.—The Great Lakes Wall Paper and Paint Company, 313 South Washington avenue, has been formed with a capital of 2,500 shares of stock, no par value, to deal in wall paper stocks. The incorporators are Maxwell F. Haffley, Downey Hotel, Lansing; and L. Linabury, Pontiac, Mich.

Waterford, N. Y.—Mohawk Paper Mills, Inc., Waterford, care of Thomas O'Connor, Waterford, attorney, has been organized with a capital of $50,000 and 500 shares of common stock, no par value, to manufacture pulp and paper products. New company will take over the mills and assets of the Mohawk Paper Makers, Inc., Waterford and Cohoes, N. Y. The incorporators are Daniel J. Halpin, George F. Morrison and Edna W. Stokes, all of Waterford.

Chicago, Ill.—The Tannenbaum Brothers Paper Company, 914 South California avenue, has arranged for a change of company name to the Tannenbaum-Zukerman Company, same address.

Bayless Company Makes Changes

E. J. Rose, well known in the paper circles and formerly connected with the Union Paper and Bag Corp. and the Southern Kraft Corporation, has been engaged by the Bayless Pulp and Paper Corporation to take full charge of sales—succeeding T. W. Cole, resigned. Mr. Rose has a host of friends in the paper trade who will wish him success in his new undertaking.

The Bayless Company has recently made very satisfactory arrangements covering its wood supply for the next ten to twelve years; and with low cost fuel and pulverizing equipment, should be one of the low cost sulphite producing mills.

The Austin plant is equipped with three Fourdrinier machines and has a rated capacity of 150,000 pounds daily. The company expects to continue the manufacture of special treated water finish papers for the meat and grocery trade, also Mitscherlich papers, colored Mitscherlich specialties and papers for waxing purposes.

D. S. Scott, long associated with the Bayless Company, will assist Mr. Rose, as will O. A. Kent, who has recently been added to the selling organization. The sales headquarters are at 2 Lafayette street, New York City.

Japanese Paper Production

WASHINGTON, D. C., September 5, 1931.—Paper production in Japan during May as reported by the mills of the Japanese Paper Manufacturers' Association totaled 56,680 tons and sales 55,782 tons, bringing the total for the five months period up to 279,108 tons and 279,479 tons, respectively. Wood pulp consumption by the mills during May comprised 29,528 tons of chemical pulp and 18,366 tons of mechanical pulp, three-fourths of the former pulp and practically all of the latter having been manufactured in the mills' own plants.

Canadian Paper Exports Decrease

Canadian exports of pulp and paper in July were valued at $10,938,148 according to the report issued by the Canadian Pulp and Paper Association. This was a decrease of $1,697,342 from the previous month.

Woodpulp exports for the month were valued at $2,475,628 and exports of paper at $8,462,520 as compared with $2,241,548 and $10,393,942 respectively in the month of June.

Details for the various grades of pulp and paper are as follows:

	July 1931		July 1930	
Pulp:	Tons	$	Tons	$
Mechanical	9,827	274,622	13,898	374,311
Sulphite Bld.	34,004	1,506,419	18,470	1,318,097
Sulphite Unbld.	1,022	436,935	17,351	852,073
Sulphate	199	222,400	5,712	345,689
Screenings	921	15,358	2,281	41,427
All Other	403	19,894	756	56,670
	48,376	2,475,628	58,468	2,988,267
Paper:				
News Print	157,205	8,223,891	199,060	11,579,862
Wrapping	540	50,775	923	96,791
Book (cwts)	2,988	23,541	3,265	29,243
Writing (cwts)	...	...	...	...
All Other	...	164,313	...	214,123
	...	8,462,520	...	11,920,019

For the first seven months of the year the exports of pulp and paper were valued at $84,361,977. In the corresponding months of 1930 the value was $106,416,853 so that there has been a decrease this year of $22,054,876.

Details for the various grades are given below:

	7 Mos. 1931		7 Mos. 1930	
Pulp:	Tons	$	Tons	$
Mechanical	81,381	2,362,041	105,382	3,055,506
Sulphite Bld.	143,719	9,252,235	154,466	11,412,460
Sulphite Unbld.	78,178	3,399,263	122,963	6,119,978
Sulphate	57,585	2,215,646	56,444	3,281,991
All Other	11,207	281,877	17,298	441,542
	372,070	17,511,062	456,553	24,311,977
Paper:				
News Print	1,182,879	64,558,113	1,366,664	78,887,825
Wrapping	6,108	565,566	8,422	884,116
Books (cwts)	15,926	134,280	24,329	228,004
Writing (cwts)	1,300	12,003	1,992	17,080
All Other	...	1,580,953	...	2,087,851
	...	66,850,915	...	82,104,876

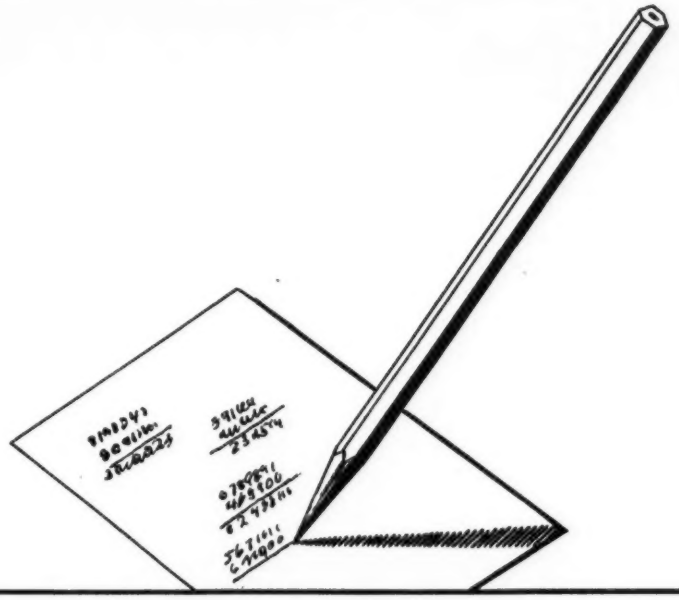
Pulpwood exports for the first seven months of this year were 513,242 cords valued at $4,877,786 as compared with 794,821 cords valued at $7,958,087 in the corresponding months of last year.

Brotherhood Prepares for Election

[FROM OUR REGULAR CORRESPONDENT]

ALBANY, N. Y., September 5, 1931.—Preparations are going forward for the annual voting contest to be held by the International Brotherhood of Papermakers early in October for the purpose of electing officers. Jeremiah T. Carey, formerly head of the organization, has been declared eligible for the presidency and will be opposed in the voting by Matthew J. Burns, present incumbent. Frank P. Barry is to have opposition for re-election as first vice president in Otis Pound, of Millinocket, Me., while George L. Schneider, of Appleton, Wis., and Charles Murtaugh, of Iroquois Falls, Ont., are seeking the office of second vice president.

Joseph Addy, of Troy, will be unopposed for third vice president but John W. Bailey, of Holyoke, Mass., will be contested by Henry Grosse, of Deferiet, for fourth vice president. E. O. Kelly, of Sault Ste. Marie, will not have opposition for fifth vice president but Dennis McCarthy, of Windsor Mills, P. Q., and James P. Nicol, of Thorold, Ont., will stage a fight for sixth vice president. David Larner, auditor, Archie R. Hook, treasurer, and Arthur Huggins, secretary, are unopposed for re-election.



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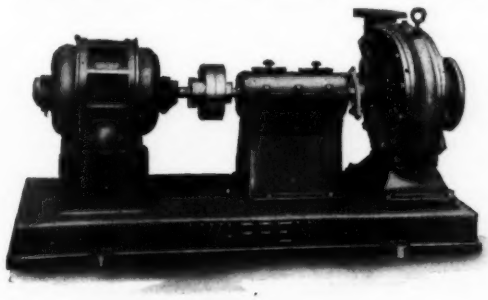

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"JOB LOTS"

A multitude of sins has for a long number of years been covered in the paper industry under the charitable name of "job lots." Especially under the present abnormal competitive conditions, this term has been employed loosely in an endeavor to cover numerous abuses, which makes timely some remarks just issued on this particular subject by S. L. Willson, president of the American Writing Paper Company, Inc. Mr. Willson's views deserve careful attention and they are presented herewith with the hope that they may help to minimize at least a form of abuse that has for so long been a cause of considerable trouble in the paper industry. He says:

"Without reference to any company or to any one line, but viewed as a general business proposition, I believe more injury is done through the sale of job lots than any other one activity in the paper industry—except that of overproduction, which is often the father of job lots, for in some instances I believe the name job lot is merely a subterfuge for offering perfects at prices below fair market prices.

"Job lots, from time immemorial, have presaged lower or job prices. The dealing in job lots in the early history of the paper industry was the almost universal and natural method of buying and selling, because no fixed standard in manufacturing for grades or sizes had been established. With increasing standardization, job lots in the mills became less and less, until today very few merchants are interested in them, as they have been displaced in the scheme of merchandising by goods of standard grades, sizes, weights, colors and finishes, and the present selling and buying of job lots is the tail end of an old practice that should, in my opinion, be completely eliminated.

"The sale of job lots establishes destructive prices for perfects. It is my belief that every manufacturer would ultimately be benefitted to a greater extent by putting back into the beaters all papers that cannot be offered as perfects, than by destroying the price levels for his perfects, and incidentally decreasing his own production. I can conceive of conditions where turnover of a size, weight, color or grade may not justify its existence, and of the necessity of disposing of it at a special price, but such lots can often be disposed of by substitution for a lower grade or by cutting down from a larger to a smaller size, or a sale made in a way that would result in no ill effects upon standard values.

"I realize that in the process of manufacturing some defective paper will always be made which must be disposed of in some way but these papers are often sold at prices not far from their value as raw materials, and the difference between the price secured and raw material value could well be absorbed by the manufacturers because of the ultimate stabilization of prices for his perfects and the resulting incentive on the part of the manufacturer to keep his product up to standard. I want to suggest that manufacturers give some consideration to this idea. It would help to stabilize prices, through its effect upon the over-production situation, and help to eliminiate scalpers in the business and free it from some of the barnacles that exist today.

"I am making this statement, not as theory, but as a practically demonstrated fact. Eight years ago the American Writing Paper Company had nearly a million dollars worth of job lots. These were disposed of and a policy established that no papers were to be shipped from the mills unless they could be classified as perfects. We continue to make imperfect lots and always shall, but the psychological lesson taught from using such defective paper as raw material after salvaging the perfects from the runs is worth more than any value of the paper—for it develops greater care, it results in maintaining standard qualities, increases efficiency, establishes prestige for quality, and ultimately reduces costs and increases profits. These *facts* have been established by experience. At each monthly inventory period stocks are carefully analysed and either priced at actual or market cost values if lower, and if any stock is to be disposed of, it is written down to the value of raw materials, and used as such when it appears the practical thing to do because of age, obsolescence, defects, or its injurious effect upon market prices if sold at a sacrifice.

"I can readily understand that with coated book papers the problem is more difficult because a greater percentage of the tonnage may not be up to standard, and as raw material such papers are at present useless, but so were old issues of news print and magazines worthless until a method of de-inking was found, so they could be used as raw materials in grades other than coarse boards, and it is not beyond the range of possibility to find, through research, some method of converting enamel seconds, reclaiming some of its component parts and again using the base raw material stock and thereby contribute to the

elimination of the destructive effect of their sale as job lots.

"Nearly every manufacturer who has sold job lots of his standard lines have had claims to allow, because of the very defects prompting their sale as job lots, notwithstanding they were sold by him as such, but the consumer having no knowledge of the original or intermediate transaction believed he had bought and paid for perfects.

"The promiscuous sale of job lots is detrimental to manufacturer, merchant and printer. It creates unwholesome competitive conditions, it destroys fair price levels, it decreases production of standard grades, it establishes a price rather than a Quality consciousness in the purchase, sale and use of paper."

Letters on Alaskan News Print

Jesse H. Neal, general manager of the American Paper and Pulp Association has received a reply to the letter he recently wrote President Hoover urging that because of economic conditions in the paper industry, any development of Alaska's timber resources for news print purposes be postponed. This reply was sent by the Secretary of the Department of Agriculture and enclosed a communication from L. F. Kneipp, Acting Forester, stating that the position of the Forest Service was that from the standpoint of the welfare of Alaska and its people, from the standpoint of good forestry management and from the standpoint of good financial management the early utilization of the timber resources of Alaska to the extent warranted by legitimate demand was in all respects desirable and deserving of proper encouragement by the Federal Government. Among other things Mr. Kneipp submitted that while there was an over supply of news print, this was largely due to importations.

Mr. Neal replied in part that while the facts submitted regarding the importation of news print was true, that the early development of the news print industry in Alaska would harm the home industry first and that it would especially harm the logical marketing territory for Alaskan news print, namely, the Pacific Coast region.

"Alaska needs no palliatives, it needs sound, firmly established industries of certain value. For them it must await the slow movement of the economic order even as other regions in their rise from pioneer conditions. The movement may be slow, but awaiting its development is preferable to the disaster of premature industrialization," Mr. Neal stated.

Paper Board Shipping Cases

[FROM OUR REGULAR CORRESPONDENT]

CHICAGO, Ill., September 8, 1931.—The Chicago offices of the Paperboard Industries Association have received a communication from the Division of Simplified Practice of the Bureau of Standards covering recommendations on paper board shipping cases. A program for the simplification of sizes of paper board shipping cases for canned fruits and vegetables has been mailed to all interests for their consideration and written approval. The recommendation establishes a list of 41 different sizes of paper board shipping cases used in packing the 27 simplified sizes of cans as approved by a general conference on January 20, 1931. It was also recommended that the maximum number of cans packed per case for the 27 simplified cans be not more than 48. The recommendation, subject to the approval of the industry, is to be effective from January, 1932.

TAPPI Notes

A progress report of the State Committee on Water Pollution has recently been issued by the Bureau of Sanitary Engineering of the Wisconsin State Board of Health, Madison, Wisconsin. Copies may be had on request of the Wisconsin Board of Health.

L. L. Griffiths formerly with the Electro Bleaching Gas Company is now a member of the sales organization of Victor Bloede in Baltimore, Md.

Folke Agerstrand has resigned his position at the Scott Paper Company and has joined the staff of the Mutual Life Insurance Company of New York in Muskegon, Mich.

Herman Heimann who was formerly a chemist for the International Paper Company at Rumford, Maine, has joined the technical staff of the Algonquin Paper Company at Ogdensburg, N. Y.

Ossian Anderson, president of the Puget Sound Pulp and Timber Company, Everett, Wash., has been appointed to membership on the Central Research Committee of the American Paper and Pulp Association.

Dr. Rosalie M. Cobb, chief chemist of the Lowe Paper Company, Ridgefield, N. J. is now engaged in a Government Research Fellowship at the American Lithographic Company plant in Buffalo, N. Y. The fellowship will be of three months' duration and is under the auspices of the Lowe Paper Company.

Indexes to the Technical Association Section of the PAPER TRADE JOURNAL for January to June, 1931 may be obtained from TAPPI, 370 Lexington Avenue, New York. Binders for this Section are also available from TAPPI at 25 cents each. One binder holds approximately three months' accumulation of the Technical Section.

New TAPPI Members

Arnold H. Anderson, a graduate of the New York State College of Forestry, Syracuse, N. Y. is at present a chemist of the Individual Drinking Cup Company at Easton, Pa. Mr. Anderson has been employed by the Scott Paper Company, Chester, Pa., and the International Paper Company at Niagara Falls, N. Y.

Robyn A. Campbell is a student at the New York State College of Forestry and has been employed as a research chemist at the Oxford Paper Company, Rumford, Maine, and the Eastman Kodak Company, Rochester, N. Y.

Everly M. Davis is conducting research investigations into the pulping of wood. He is a graduate of Stanford University in California and the Harvard Law School and was president of Butterworth Judson Company, the largest manufacturer of picric acid during the late war.

Ralph B. Hansen is technical director of the Pulp Division of the Weyerhaeuser Timber Company, Longview, Washington. He is a 1926 graduate of the University of Washington. For 3½ years he was director of research for the Rainier Pulp and Paper Company, Shelton, and chief chemist of the Olympic Forest Products Company, Port Angeles, Washington.

Robert Karlberg has been research director and engineer of Holmens Bruks A/B, Hallstavik, Sweden, since 1917. He is a graduate of the University of Lund and the Royal Technical University of Sweden.

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Section of the
Technical Association of the Pulp and Paper Industry
Edited by Ronald G. Macdonald, Secretary

Current Paper Trade Literature

Abstracts of Articles and Notes of Papermaking Inventions Compiled by the Committee on Abstracts and Bibliography of the Technical Association of the Pulp and Paper Industry

Clarence J. West, Chairman

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Machinery

The Size of Table Rolls. N. Wunderlich, Wochbl Papierfabr. 62, No. 5; 98-100 (Jan. 31, 1931); Papier 34: 165-166, 169 (Feb., 1931). By means of numerous data and curves, the author shows how to determine the diameter and the thickness of the walls of table rolls for various machine widths. Although the ideal table roll should be of small diameter, the speed of the present day machines requires larger table rolls to decrease the speed of rotation. The table rolls should be made completely of brass and not just have a covering of brass, especially when the machine operates with a shake, there should be as little weight as possible.—J.F.O.

A Completely Automatic Operating Unit to Convert Unsorted Old Papers Into a Stock Ready for the Machine. Anten D. J. Kuhn. Zellstoff Papier, 11, No. 2; 90-91 (Feb., 1931. The author describes his completely automatic system to convert old paper into the finished stock without any intermediate handling. The process consists, in general, of a breaker beater which mechanically separates the unusuable refuse and delivers a fiberous material to the screw press which removes a considerable amount of water as well as kneeding and rubbing the fiberous material into a more uniform stock from which the stock passes to a defibering apparatus which finally delivers the stock to a chest in a finished state for the paper machine. The system claims a saving of labor, power, materials, etc.—J.F.O.

Wires and Suction on a Paper Machine. Zellstoff Papier, 11, Papier, 11, No. 2; 85-88 (Feb., 1931). The author first gives a table showing the wire and felt life and production for a machine equipped with suction boxes separated from each other and one in which the suction boxes are all connected and together. The figures show great economies for the suction boxes connected, over the separated suction boxes. Although it is recognized that the more suction boxes the greater wearing of the wire, it is also possible by increasing the suction boxes and lowering the suction that there will be less wearing of the wire. If the water is separated from the air, only a third of the power is necessary to keep the suction box clear. The wood used in making the suction boxes should lie under water at least five months, in this way a glass like surface will be attained.—J.F.O.

A Winder Drive with an Automatic Speed Regulator. P. Weiske and K. Rupprecht, Berlin. Wochbl Papierfabr. 62, No. 11; 249-253; No. 12; 275-279 (March 14, 21, 1931). The author describes the various drives and their control used for winders, discussing the advantages and disadvantages of each. In conclusion, a description is given of the automatic speed regulator. The article is accompanied with numerous curves and drawings. —J.F.O.

Electrically Driven Paper Machines and Constant Speed Regulating System. Wilhelm Stiel and Artur Haak, Wochbl Papierfabr. 62 No. 23A; 74-82 (June 6, 1931). After a comprehensive discussion of various drives and their means of control the authors discuss the two main methods of control. The mechanical control method with its guide shaft and mechanical differential and the electrical method with its frequency regulator and its electrical differential are compared with the result that the authors emphatically recommend the mechanical system which has given perfect service for the past twelve years as proven by the satisfaction of the Siemens-Harland control. —J.F.O.

Arrangement for the Regulation of the Various Motors in Machines with Multiple Drive. Siemens- Schuckert-Werke A. G. Berlin. Swed. pat. 70,362 (Jan. 31, 1929). The speed regulator for the single motors is governed by speed of the preceding motors and the speed of the single motor itself.—J.F.O.

Arrangement for the Setting and Maintaining Constant the Relative Speed of a Desired Number of Asynchronous Motors. Allgemeine Elektricitats-Gessellschaft, Berlin. Ger. pat. 508,877 (Oct. 10, 1926). The invention concerns a number asynchronous motors, which serve as the drive for paper machines or similar apparatus requiring the same drive conditions, whereby each asynchronous motor is provided with a frequency changer. The frequency changer is constructed as a asynchronous machine with a movable stator, its rotors are rigidly coupled with each other or arranged to a common shaft.—J.F.O.

Device for Obtaining the Absolute or Relative Speed of the Drive Motors, Especially for Paper Machines. Austrian Brown Boveri A. G., Vienna. Aust. pat. 119,316 (April 15, 1929). Between each of the drive motor being regulated and their auxiliary motors, a differential drive is connected which regulates the speed

of the drive motors. The auxiliary motors whose speed is a function of the load, serves as an aid to the drive motors.—J.F.O.

Unit Electric Drive on a Paper Machine in which the Speed of Rotation of the Single Units are Regulated to a Constant Relation to Each Other. A. G. Brown Boveri & Cie, Baden. Ger. pat. 508,878 (May 3, 1927). The purpose of the invention is to make the tension of the conical belt drive useful in setting the regulator device, the conical belt drive being used to set in motion each single unit and is placed between each part of the machine and a guide motor.—J.F.O.

Generating or Buying Electrical Power, with Special Reference to the Increase in Steam Pressure and Its Relation to Combined Units. G. Lest, Muskau. Wochbl Papierfabr. 62, No. 23A; 63-68 (June 6, 1931). An economic discussion concerning the advisability of generating or buying of electrical power. The initial high cost for high pressure steam installations precludes its use except for the larger companies. The author then classifies mills into the following groups, (1) paper and board mills without a ground wood department, (2) paper and board mills with a ground wood mill, (3) mills manufacturing pulp only, and (4) pulp and paper mills; giving in each case the most advantageous layout.—J.F.O.

Barking Drum. John Strindlund. U. S. pat. 1,779,568, (Oct. 28, 1930).—The invention relates to barking drums of the type which rotate partially submerged in water and which are provided on their inner sides with ribs which, during the rotation of the drums, catch and lift and logs in the drum and allow them to fall, the drum being supported by two endless chains each of which runs around the drum and over a chain-wheel. The chief feature of the patent lies in that each chain-wheel is adjustably mounted in the vertical direction so as to render possible adjustment of the position of the drum in the vertical direction as the chains become worn. Preferably, one of the chain-wheels also serves as a driving wheel for the drum.—A.P.-C.

Log Barker. Orlo A. Bartholomew. U. S. pat. 1,781,942, (Nov. 18, 1930).—The apparatus, which is intended more particularly for the barking of long logs, comprises a tank, preferably with semi-cylindrical bottom. After a suitable number of logs have been fed into the tank, they are rocked back and forth in the tank until the bark has been rubbed off, and are then discharged into a receiving tank.—A.P.-C.

Log Barking Apparatus. Herbert W. Guettler. U. S. pat. 1,787,725, (Jan. 6, 1931).—The logs are placed in a vat or tank, and by alternately raising and lowering the water level the logs are first floated and then lowered to strike against one another and form a compact mass, this operation being repeated to quickly break and loosen the bark. In addition, the body of water is subjected to a combined pulsating and circulatory motion in such a manner as to cause the logs to strike against one another when floating, so as to further assist in breaking and loosening the bark. The apparatus in which the operation is carried out consists of a tank connected at the bottom with a large cylinder provided with a piston, and the raising and lowering of the water level in the tank is produced by the action of the piston. The operation can be rendered continuous by feeding the logs continuously at one end and withdrawing them at the other. If desired, two or more tanks can be connected in series.—A.P.-C.

Circulating Apparatus for Wood Pulp Digesters. Albert G. Natwick. U. S. pat. 1,784,197 (Dec. 9, 1930).—Steam is introduced into the bottom of the digester through a nozzle constructed to provide a conical jet of steam. Above the nozzle is a vertical Venturi tube the upper end of which is connected to a straight vertical pipe extending to near the top of the digester. Circulation is thus automatically produced by introducing steam to cook the contents of the digester.—A.P.-C.

Circulating Apparatus for Sulphite Wood Pulp Digesters. Einar Morterud. U. S. pat. 1,785,591 (Dec. 16, 1930).—The means for effecting circulation of the liquor consists in pipe lines mounted in the interior of the digester and communicating at one end with intake and outlet openings, respectively, located adjacent to each other near the middle of the digester and connected at their opposite ends with sieve boxes located respectively near the lower and upper ends of the digester. The circulation pipes comprise at least two sections, which are individually fastened to the digester wall at one point only for each section and which fit loosely into each other without the use of any kind of packing box or the like; this construction enables each section to expand freely without causing any stress at the fastening clamps or joints. —A.P.-C.

Method of Preparing Cellulose Pulp from Bagasse and the Like. Harry L. Horn assignor to Bagasse Development, Inc. U. S. pat. 1,779,971 (Oct. 28, 1930).—Shredded bagasse is introduced into a, preferably cylindrical, horizontal rotating digester, in which are a number of loose non-metallic rods of practically the same length as the digester. The digester is lined with a non-conducting material. A solution of sodium chloride is next introduced into the digester, which is rotated for about two hours while passing an electric current through the solution. Lime and soda ash are next introduced, and the contents of the digester are steamed at a pressure of 30 to 50 lbs. per sq. in. for a further 1 to 2 hours, while continuing rotation of the digester.—A.P.-C.

Apparatus for Washing Pulp. Otto Mantius. U. S. pat. 1,788,840 (Jan. 13, 1931).—The apparatus comprises a series of consecutively co-operating conveyors with which are associated pressure rolls to form between them converging mouths through which the pulp to be operated upon is passed by the conveyors to subject it to successive compressing operations. Contiguous to the outlet of each pressure mouth is a shredding and washing device. The washing is preferably carried out on the countercurrent principle. A novel feature of the apparatus consists of a soft-surface suction roll located at the top of the outlet of each tapering mouth to absorb the water to be removed from the upper conveyor and to transport it to a position where it can be squeezed out of the roll and delivered to a suitable trough inside the roll. Each of the washers and shredders consists of a tank in which are mounted a number of parallel horizontal drums; the bottom of the tank is in the form of curved troughs corresponding to the curvature of the drums; the periphery of each drum is provided with pyramid-shaped studs, and similar studs are mounted on the bottom of the troughs in such a way as to permit of rotation of the drums in the troughs.—A.P.-C.

Wood Pulp Refiner. Linus A. Braun. U. S. pat. 1,784,039, (Dec. 9, 1930).—The pulp (or wood chips) are fed, along with water, into a hollow, cylindrical, horizontal casing. The inner wall of the casing is lined with an abrasive surface, preferably in the form of a screen consisting of a sheet of relatively heavy, case-hardened, expanded metal, provided with projections to cut, tear and comb the fibers. Hammers are pivotally mounted between a series of disks keyed to a shaft coaxial with the casing. The material is delivered to a second casing aligned with the first, provided with a cylindrical screening surface, through which the material is forced, when sufficiently reduced, by a rotating paddle-like beater.—A.P.-C.

White Water in Paper and Pulp Mills and Its Utilization. R. J. Marx. Trans. Inst. Chem. Eng., Advance copy, Dec., 1930: 24-29; C. A. 25:3165.—White water is the effluent from the passage of the aqueous suspension of fiber over a close-meshed wire in a paper machine. Settling methods for fiber removal were used first but these are mostly of low efficiency. An early power-driven machine employed an endless belt travelling over a wire-covered drum. The Dorr save-all consists of a vertical tank with horizontal trays connected close to the vertical shaft, which carries one scraper in each chamber. The Oliver save-all is a horizontal revolving cylinder with a wire screen in which the deposited fiber forms a filtering medium. It has oscillating rakes and works under suction. Marx prefers a gravity settler, in which the water is allowed to fall as it drops on to a distributing surface. The impacts cause the separation of entrained air from

the fiber, which thereafter settles readily in a large conical tank with bottom-discharge for solids.—C.J.W.

Sand Catcher for the Manufacture of Pulp and Paper. Willi Schacht, and A. G. fur Zellstoff- und Papierfabrikation, Aschaffenburg. Ger. pat. 503,452 (Feb. 20, 1927). The apparatus serves for the separation of specific heavy impurities and foreign matter carried along with the stock as well as to separate uniformly and disintegrate the stock mixture. The apparatus consists of several stages, the space in each succeeding stage increases.—J.F.O.

Felt Regulator. Maschinenfabrik J. M. Voith, Heidenheim, Germany. Nor. pat. 48,542 (June 5, 1929). By means of a roll moving slightly faster than the felt and revolving about an axis, the felt is kept in a true running condition.—J.F.O.

Screw Press. Christian Holter, Oslo and Olaf Qviller, Skoyen, Norway. Aust. pat. 119,584 (May 15, 1930). In the final stages of water removal in a screw press, the pressed material is often so compact that it prevents the rotation of the screw, whereby the action is interrupted. This invention removes this evil by placing at the open end of the screw shaft a special trunnion.—J.F.O.

Grooved Press Roll. A. S. Myrens Verksted, Oslo, Norway. Fin. pat. 13036 (March 26, 1927).—J.F.O.

Experiments made on a funnel shaped save-all built according to the system of Arledter. Gerhard Schmidt. Wochbl Papierfabr. 62, No. 5: 100-102 (Jan. 31, 1931). By means of actual operating data, the author shows the good results obtained with this type of save-all. The construction and operation of the save-all is given in detail.—J.F.O.

White-Water System. Charles Dupuis. U. S. pat. 1,787,341 (Dec. 30, 1930).—The suction pump connected to the paper-machine suction boxes delivers the white water to a white-water receiving tank. A pipe leads from the bottom of this tank to the paper-machine fan pump, while at the top is an overflow pipe discharging into a discharge pit. An outlet from the bottom of the paper-machine head box also leads to the pit, so as not lose the stock when shutting down the machine. A pipe extends vertically downward from the bottom of the discharge pit at the bottom is a T connection, connected on one side to a series of settling tanks and on the other to the suction side of a pump which delivers white water to the white-water receiving tank and also to the beaters. The settling tanks have sloping bottoms which form a continuous inclined plane from the first to the last tank of the series, the highest point of the bottom of one tank being connected to the lowest of the next succeeding tank. The clear water is pumped out at the highest point of the bottom of the last tank.—A.P.-C.

Method Of and Apparatus For Selecting Fiber. Robert A. Webber assignor to Brown Co. U. S. pat. 1,786,973 (Dec. 30, 1930).—The invention provides for the selection or separation of long fibers from pulp. The method consists in causing relative motion between a pulp suspension and edge-presenting members or "edges" capable of picking up the long fibers, and when removing and recovering the picked up fibers. Either the pulp may be flowed past the edges, or, preferably, the edges may be moved through the pulp. The selector involves the use of multiple edges, which may take the form of blades or wires (preferably non-circular in cross section). The fibers may be removed from the edges by shaking or, preferably, by spray-washing.—A.P.-C.

Paper-Making Rolls. Max Wenzel. U. S. pat. 1,783,868, (Dec. 2, 1930).—The outer surface of the roll over which the jacket fits, is made with a number of longitudinal ridges or projections, and the inner surface of the jacket may be provided with corresponding grooves.—A.P.-C.

Method Of and Means For Making Decorated Paper. Jesse H. Trask. U. S. pat. 1,787,218 (Dec. 30, 1930.—Over a suitable part of the wire, where the sheet is formed, an endless flexible belt (e.g., of rubber) mounted on rolls which are adjustable so as to regulate the tension, comes in contact with the moist web. Suitable designs are attached to the rubber belt, so as to produce a marking similar to a watermark. Preferably, the belt is perforated to form a stencil; over the place where it is in contact with the wet paper there is a flow box into which is fed a colored stock to deposit colored pulp on the sheet through the stencil openings, and directly underneath is a suction box to accelerate drainage of water and increase the amount of colored stock deposited.—A.P.-C.

Mounting of Paper Machine Suction Rolls. William H. Millspaugh assignor to The Paper and Textile Machinery Co. U. S. pat. 1,789,445 (Jan. 20, 1931).—The invention, while applicable to other machines, is more particularly intended for the mounting of the suction transfer roll used in the new Millspaugh machine for bringing together the piles of two-ply paper. The rear-end head of the suction roll is considerably longer than usual, so that it extends farther into the roll, and also farther out than in ordinary suction rolls. The head is provided with two bearings which are mounted on an inverted U-shaped carriage supported on two oppositely directed channel beams along with the head (and with it the whole roll) can be run out when the wire is to be changed. When the machine is in operation, the rear-end head is supported on a pedestal independent of the carriage and beams.—A.P.-C.

Machine for Making Laminated Paper. William H. Millspaugh assignor to The Paper and Textile Machinery Co. U. S. pats. 1,783,969 and 1,783,970 (Dec. 9, 1930).—*No. 1,783,969*—In the new Millspaugh paper machine, for making laminated paper, top and a bottom press felts are provided. Some of the plies are transferred to the top felt and the others to the bottom felt, and the sheet-carrying runs of the felts are brought together and passed through a press. *No. 1,783,970*—The web-forming suction rolls are associated in pairs, and the two webs of each pair are combined on one of the two wires. The duplex sheets thus obtained are then deposited one upon another on a press felt.—A.P.-C.

Fourdrinier Paper Machine. Edward J. Crowson. U. S. pat. 1,779,087 (Oct. 21, 1930).—The guide roll for the wire is mounted so that it is given a slow reciprocating motion transversely of the direction of travel of the wire by means of a reversing and speed-reducing mechanism operated by the guide roll itself. An automatic wire guide engages with an edge of the wire in order to maintain the wire centered with respect to the roll. The wire is thus slowly moved back and forth transversely of the suction boxes and does not groove the covers.—A.P.-C.

Shake Mechanism for Fourdrinier Paper Machines. Frederick A Bowman assignor to The Pusey and Jones Corp. U. S. pat. 1,786,933 (Dec. 30,1930).—The patent covers mechanical details of construction of the shake head designed to make the mechanism rugged so as to withstand the severe strains caused by rapid vibration of the heavy shake frame, and to permit of accurate adjustment of the amplitude of the shake while the machine is in operation.—A.P.-C.

Shower Pipe for Paper Machines. Paul H. Mielke assignor to The Paper and Textile Machinery Co. U. S. pat. 1,788,469 (Jan. 13, 1931).—This is essentially an improvement on Millspaugh's U. S. pats. 782,680 and 782,755, of Feb. 4, 1905. The deflecting lip or plate provided in the older patents is now made separate from the pipe, and a groove in the plate engages a dove-tail shaped rib or tongue on the pipe along which it is slid into position and to which it is securely keyed. The purpose of this construction is to prevent grooving of the plate by impurities such as dirt which may be present in the shower water, particularly when the water is used under high pressure, or to permit of changing the position of the plate when such grooving begins.—A.P.-C.

Device for Overcoming Two-Sidedness of Papers Such as Book or Catalogue Papers. John Traquair assignor to The Mead Pulp and Paper Co. U. S. pat. 1,786,681 (Dec. 30, 1930).—No felt is used at the second press. A trough is mounted to cooperate with the lower press roll and deliver a suitable suspension of filler (e.g., a mixture of thickened tray water, starch and clay) to the surface of the roll. On passing through the nip of the press, the film of filler adhering to the surface of the roll is incorporated into the wire side of the sheet, the amount thus incorporated being regulated by adjusting the distance between the

top and bottom press rolls. If desired, filler may also be added to the other side of the sheet by using a three-roll press and providing a similar trough to co-operate with the middle as well as the bottom roll, the sheet being led out of contact with the middle roll by passing it around two guide rolls which reverse it between the two nips of the press.—A.P.-C.

Spear Pole for Removing Paper from the Rolls of Paper Machines. Ray B. Hull. U. S. pat. 1,782,349 (Nov. 18, 1930).—The pole is constructed of laminated soft wood, such as white pine. By making it three ply, the strength of the pole is doubled and it is still soft enough not to injure the felt jackets of the rolls.—A.P.-C.

Doctor for Paper Machine Rolls. John Wenzel. U. S. pat. 1,786,587 (Dec. 30, 1930).—The doctor is mounted on a shaft parallel to the roll and is connected to an operating handle through a lever and a rod provided with a turnbuckle. By operating the handle, the doctor can be rapidly thrown into or out of engagement with the roll, and by adjustment of the turnbuckle the pressure of the doctor against the roll is easily and quickly regulated.—A.P.-C.

Apparatus For and Method Of Threading Paper Through a Paper Machine. Harvey G. Cram and Roy V. Weldon assignors to Great Northern Paper Co. U. S. pat. 1,789,515 (Jan. 20, 1931).—The carrier ropes of the driers (e.g., Sheahan carrier) are extended to the last press and across the space between the last press and first drier. The ropes are arranged so that the lead strip is inserted between them at the last press and is caused to be carried automatically from the press to the drier and then successively through the whole drier section.—A.P.-C.

Cylinder Mold for Paper Machines. Tario Yonekura. U. S. pat. 1,782,281 (Nov. 18, 1930).—The surface of the cylinder mold is provided with a number of spaced annular flanges defining circular chambers into which the water penetrates on passing through the wire covering. The surface of the cylinder mold proper is perforated to permit the water passing into the interior of the cylinder mold.—A.P.-C.

Cylinder Mold for Paper Machines. John S. Little assignor to Western Electric Co., Inc. U. S. pat. 1,788,531 (Jan. 13, 1931).—In a cylinder mold suitable for the simultaneous production of pulp strips and application of the strips to wire cores to insulate the latter, the dams or deckles which define the edges of the pulp strips consist of strips of celluloid attached to the wire by the action of a solvent such as acetone.—A.P.-C.

Steam Fitting for Paper Machine Driers. Alonzo Aldrich. U. S. pat. 1,779,576 (Oct. 28, 1930).—Both the steam inlet pipe and the condensate and exhaust steam outlet pipe are connected to the drier through a connecting member in the form of a pipe projecting outwardly from the drier hub or trunnion. In each case the joint is effected by providing the steam inlet (or condensate outlet) with a conical face fitting into a corresponding cup face, the space between the two faces being filled with suitable packing material, and the two parts being held together by a bolt and spring. The siphon pipe is rigidly connected at its outer end with a head at the outer end of the connecting member. This head is provided with a disk marked with an arrow and held in contact with a corresponding disk on the connecting member; the latter disk carries a graduated scale, so that the position of the siphon pipe inside the drier is known by noting the point of the scale opposite the arrow on the outer disk.—A.P.-C.

Machine for Rewinding Toilet Paper. Lino Scusa. U. S. pat. 1,779,562 (Oct. 28, 1930).—The supply roll is mounted directly upon one of the perforating rolls, and the other perforating roll is arranged to perform the added function of the usual press rolls, viz., of exerting the constant tension required for smooth and positive feeding and winding of the paper. The slitting mechanism proper comprises a shaft on which are mounted a number of evenly spaced circular knives; it is swingingly mounted close to the rewinding drum so that the supply web is cut after it has become partially wound upon the drum. The slitter shaft is preferably driven in the opposite directions to, and at a higher speed than the winding drum so that the knives may effect slicing rather than shearing of the paper. The slitter drum is automatically controlled to compensate for the progressive increase in the diameter of the rewound rolls, as well as for swinging the slitter drum back to the starting position, corresponding to the peripheral plane of the next series of empty cores, at the end of the winding period.—A.P.-C.

Drive for Paper Machines. Friedrich Schiebur assignor to Siemens-Schuckertweke Aktiengesellschaft. U. S. pat. 1,784,545 (Dec. 9, 1930).—In the field circuit of the direct-current sectional motors is connected an adjustable resistance, the value of which is determined by a differential gearing, one side of which is driven by the motor to be controlled, while the other side is driven by a master motor common to all the motors. The master motor may be a separate auxiliary motor or one of the sectional motors. It may be necessary to change the speeds of all the motors following any sectional motor. This is obtained by coupling with the master motor one member of a differential gearing, the other member of which is coupled with the respective shaft of the sectional motor, and the casing of which is rotated with an adjustable speed. The shaft co-ordinated to the section-driving motor is also connected with a further differential gearing forming part of the next following sectional motor, the other side of which is coupled with the shaft co-ordinated to the next following sectional motor, the casing of the differential gearing being rotatable at an adjustable speed. The shafts of the various sectional motors are furthermore connected, e.g., by a bevel gear, with one side of a differential gearing, the other side of which is driven by the sectional motor to be controlled, the rotation of the casing of the differential gearing determining the value of the resistance connected in the field circuit of the section motor. A similar provision is made for all the other section motors.—A.P.-C.

Method of Forming Rolls with Offset Insert Strips. Clarence B. Andersen. U. S. pat. 1,779,578 (Oct. 28, 1930).—In the case of small rolls in which the outer convolution is glued to the next adjacent convolution, it is desirable to insert a tab or strip, projecting slightly from the edge of the roll, beyond the two outer convolutions, to facilitate freeing the glued outer convolution when the roll is to be used. When the paper from the main supply roll has been slit and rewound into smaller rolls of the desired diameter, the machine is stopped, a strip of gummed paper of the same length as the width of the supply roll and scored to correspond with the widths of the small individual rolls is moistened at points midway between the score marks and is applied across the slit sheet, between the slitters and rewound rolls, with the score marks slightly offset from the cuts made by the slitter. The upper surface of the sheet is then covered with glue. The machine is operated for a moment to wind the glue-covered portion of the web. After removing from the winding core, the rolls are readily separated and each has a projecting tab.—A.P.-C.

Jordan Plug. Brownell Buehler assignor to Noble and Wood Machine Co. U. S. pat. 1,780,863 (Nov. 4, 1930).—The bars are constructed so that they fit loosely in their grooves until they are practically seated and then have engagement with the walls of the groove to seat firmly and avoid danger of loosening in use. This is obtained by constructing the bar and groove so as to produce a wedging action between the walls of the groove and the groove-engaging portion of the bar which is not effective until the bar is substantially seated.—A.P.-C.

Pulp Board Making Machine. Emil C. Loetscher. U. S. pat. 1,787,047 (Dec. 30, 1930).—The upper reach of an endless traveling wire passes through an elongated, open, rectangular tank in a slightly upwardly inclined direction. The wire is slightly wider than the tank, and sealing means are provided along the sides and at the wire inlet and outlet to prevent the stock from leaking out. The pulp is delivered to the wire at its lower end by means of a hopper provided with a longitudinal rotating agitator at its discharge opening. The material deposited on the wire is sprayed with water. A suitable vacuum is maintained in the lower portion of the tank under the wire. Extending lengthwise of the tank, and

just above the wire, are a number of thin dividing bars to divide the sheet as formed into smaller strips of any desired width. From the wire, the sheet is delivered between a pair of felts passing between two pairs of rolls which are adjustably pressed towards each other.—**A.P.-C.**

Paper Machine Rolls. H. Milne. World's Paper Trade Rev. 96: 1274-1280 (April 10, 1931); Paper Maker 81, No. 4, suppl.: cxx-cxxii (April, 1931).—A brief discussion of the work done by the various paper machine rolls and of the conditions required to enable them to accomplish this work as well as possible.—A.P.-C.

Notes on the Evolution of the Fourdrinier Paper Machine. James Strachan. World's Paper Trade Rev. 96: 970, 972; 1145-1148; 1217-1218 (Mar. 13, 27, April 3, 1931).—An address outlining the development of the paper machine from its invention by Louis Robert to the present modern, high-speed machine.—A.P.-C.

Stock Inlet for Fourdrinier Paper Machines. J. M. Voith. Fr. pat. 697,157 (Oct. 21, 1930).—Instead of allowing the stock to flow on to the wire by gravity, it is delivered to and uniformly distributed on the wire by means of compressed air. If desired, a number of nozzles may be provided to deliver stock or fillers at several points along the length of the wire.—A.P.-C.

Device for Preventing Breaking of the Sheet at the Wire or Couch Press of Paper Machines. Nils A. Jacobsen. U. S. pat. 1,791,412 (Feb. 3, 1931).—When a break occurs at the couch press or on the wire, the broke which follows around the couch roll is stripped off and made to fall on a hinged plate, the action of which opens a water jet to divide the web on the wire into two parallel strips so as to prevent the tear from extending completely across the width of the sheet.—A.P.-C.

Suction Couch and Press Rolls. B. T. McBain. Paper Trade J. 92, No. 12: 62-63 (March 19, 1931); Tech. Assocn. Papers 14: 135-136 (May, 1931).—A review of the development of the suction roll for paper machines, particular emphasis being put on applications and the contribution of W. H. Millspaugh.—A.P.-C.

Ball and Roller Bearings on Paper Machines. Anon. Industrie Papetiere 10, 103-113 (March, 1931).—After briefly indicating the advantages of anti-friction bearings on paper machines, examples are given of the construction of bearings which have been found satisfactory for various parts of the paper machine.—A.P.-C.

Modern Paper Manufacture. D. T. MacIvor. World's Paper Trade Rev. 95: 1084-1090 (March 27, 1931).—The drives of the four paper machines at the Northfleet mill are described, one of the machines having sectional direct-current drive with a mechanical interlock between the section motors, while the other three have the British Thomson-Houston drive using alternating-current commutator motors.—A.P.-C.

Device for Acting on the Regulating Speed of the Synchronizing Mechanism of Paper Machines. Societe anonyme des Ateliers de Constructions Mecaniques Escher Wyss & Co. Belg. pat. 372,516 (Sept. 30, 1930).—The driving speed of the synchronizing mechanism is adjustable independently of the speed of the paper machine. Adjustable means are provided to bring the ratio of the working speed of the machine to the driving speed of the synchronizer to the desired value.—A.P.-C.

Device for the Evaporation and Cooling of Liquids. Paul Muller, Hanover. Ger. pat. 513,789 (Nov. 21, 1924). The invention concerns itself with a device for the evaporation and cooling of liquids by self evaporation in a chamber under vacuum in which the liquid in an over heated condition flows through a pipe leading from the bottom to the top.—J. F. O.

New Method for the Calculation of the Capacity of a Paper Machine. Alfred Wallner. Wochbl. Papierfabr. 62, No. 9: 199-200 (Feb. 28, 1931). By means of numerous equations the author explains his method for the calculation of the theoretical production of a paper machine.—J. F. O.

Barking Drum. A. G. Johansson, Waplan. Swed. pat. 70,412 (Jan. 17, 1929); addition to pat. 66,623. The drum is hung on at least two roller chains which are driven from above, its motion is carried over by friction onto the rings of the drum. In the center of these, at least one ring is arranged.—J. F. O.

White Water Save-All According to the Patented System of Nils Pedersen and Sveen. Wochbl. Papierfabr. 62, No. 7: 142-153 (Feb. 14, 1931). In the conical save-all, the fibers are recovered by removal from the bottom of the cone, but it often happens that the fiberous material is surrounded by air and will not sink to the bottom readily and hence conical save-alls must have a large capacity, especially if various colored papers are made. In the new system of Pedersen, the fibers are removed from the top and when necessary the solution is aerated. The air bubbles must be small and of sufficient quantity to perform the work. A scraper operates on the surface of the solution and removes the fibers which are gathering on the surface of the save-all.—J. F. O.

Process for the filling of digesters. Per Albert Fresk, Robertfors, Sweden. Ger. pat. 503,580 (Nov. 2, 1924). The filling of the digesters takes place by the action of one or more streams of air and at the same time air is being removed from the digester.—J. F. O.

Digester with nozzles sunk in the wall serving to introduce steam into the digester. Fritz Voltz Sohn. Frankfurt a. M. Ger. pat. 500,568, (Jan. 29, 1927). In order to effect an even distribution of steam into the digester and to hasten the cooking process, a series of rings are placed in the digester wall, one above the other, with nozzles for introducing the steam.—J. F. O.

Thorne Barkers or knife barkers. Wochbl. Papierfabr. 62 No. 7, 148-152, (Feb. 14, 1931). A continuation of the polemic over the economic advantages of the Thorne Barker over the knife barkers. Several authors defend and refute arguments for and against these types of barkers, in an attempt to prove which barker is the most economical. Power and labor costs are elaborated upon and the losses from each barker are contested muchly.—J. F. O.

Process and device for the filling of pulp digesters. Max Weckwerth, Josifihutte, Czechoslovakia. Ger. pat. 502,162 (April 26, 1927), The chipped wood is blown from the screens to the chip bin or by means of a butterfly valve can be blown directly into the cooker. The line going directly to the digester also acts as an injector and thus chips from the bin filled into the digester along with the chips coming directly through the pipe from the screens. A telescopic pipe is also provided which can be introduced into the digester and drawn up as the digester is being filled. At the finish the butterfly valve is changed and the chips are fed into the bin, an el at the end makes it possible to direct the chips into any place in the chip bin.—J. F. O.

Process and device for the filling of spaces with chopped materials, especially for digesters used in the manufacture of pulp. Zellstofffabrik Mannheim. Ger. pat. 502,662 (July 22, 1925), The digester is connected to the chip bin by means of a pipe, whose lower end is provided with a mechanical centrifugal device, such as a propeller, which throws the chips about in the digester. The centrifugal device can be regulated so as to spread the chips evenly as the digester is being filled closer and closer to the top. An electric motor or steam turbine can be usd to drive the centrifuge, the exhaust steam from the turbine can be used to heat or steam the chips.—J. F. O.

Suction box for machines used in the manufacture of paper, board and for the removal of water from cellulose and similar materials provided with a supporting roll placed tightly against the box. Ernst Kramer, Nitra, Czechoslovakia. Ger. pat. 511,163 (Sept. 14, 1929), The outside rolls, in the direction of motion, are pressed tightly against the suction box provided with rubber strips, and are of a larger diameter than the inner supporting rolls. These supporting rolls have their bearings in a frame which is within the suction box.—J. F. O.

Arrangement on suction cylinder for ground wood, pulp and similar materials. S. Diesen, Oslo, Norway, Swed. pat. 70,518 (July 7, 1927). The cylinder divided by radially directed walls or cells forms one of the walls of the stock chest. A container for water is placed under the cylinder into which the empty cells dip and become filled with water before they come in contact with the stock mixture in the following stock chest. —J. F. O.

Reel Stand. Gerald Strecker and Theodor Gockel, Darmstadt. Ger. pat. 510,275 (June 23, 1929). The changing of empty reels for new ones without shutting down the machine can be carried out by means of a special carriage so designed that new rolls can be placed on the stand without any interruption.—J. F. O.

Device for fastening the paper to a round core. Paul Siegel, Geyersdorf. Ger. pat. 509,560 (Nov. 26, 1929).—J. F. O.

Sand catcher or riffler. Gottl. Fr. Thomas & Sohn, G. m. b. H. Lengenfeld. Ger. pat. 511,698 (June 1, 1929). The invention concerns itself with a sand catcher in which the stock is led over a trough whose bottom is covered with a felt. It is characterized in that the felt is displaceable and can be removed or easily washed in position.—J. F. O.

Device for removing the water from a felt just before it passes through the press rolls, in a continuous operating paper machine. Societa Invenzioni Brevetti Anonima-Torino, Turin, Italy. Ger. pat. 511,549 (Nov. 9, 1928). The suction device is attached to the shaft of the press.—J. F. O.

Layboy, especially for thin and Light papers. Gerald Strecker, and Theodor Gockel, Darmstadt. Aust. pat. 119,799 (June 15, 1930).—J. F. O.

Process for the manufacture of a threadless union of the ends of metal cloth, especially metal cloths used in the manufacture of paper. Hutter & Schrantz A. G. Vienna. Aust. pat. 119,800 (June 15, 1930). The end weft on which the other free lying warp threads are placed is composed of a metal wire which is weaker and harder than the weft thread of the other part. —J. F. O.

Device for the cutting and winding of very narrow strips of paper. Societe d'Exploitation des Tissus d'Art Baltiss, Paris. Ger. pat. 511,499 (April 18, 1929). The strips of paper are independent of each other and subjected to a like tension by means of weights. In order to avoid the coming together of adjacent strips, they are led over rolls placed at various heights. —J. F. O.

Screen for pulp, ground wood and paper stock. Rupert Sieber, Gratkorn, Austria. Ger. pat. 511,548 (July 14, 1927). A revolving spiral is placed inside a drum, revolving at a different speed, the drum being perforated or having slits. The spiral acts in conducting the unrefined stock to the end of the drum where it is removed by a special device.—J. F. O.

Device for obtaining an air tight entrance in band dryers. Hermann Haas, Lennep. Aust. pat. 119,753 (May 15, 1930). Special high pressure blowers occupy the space under the band and blow warm air at the entrance of the wet sheet, so that the rising warm air of a higher pressure than the outside air, hinders the exit of the warm air and prevents the entrance of the cold air.—J. F. O.

Screen for paper stock, pulp and similar materials. Paul Erkens, Duren. Ger. pat. 510,980 (April 27, 1927). The screen consists of two drums one lying within the other, the walls of the outer drum is solid while the walls of the inner drum is provided with slits.—J. F. O.

Conveyor system for the transportation and operation on various paper packing and finishing work. Hans Rinderknecht, Wochbl. Papierfabr. 62, No. 23A, 59-62 (June 6, 1931). A description of an endless belt on which the finishing operations are performed on the bundle of paper, from lay-boy to scales. The article is accompanied with many illustrations.—J. F. O.

Importance of the rubber roll for the rational management of a paper machine. Gustav Becker, Wochbl Papierfabr. 62, No. 9, 195-197 (Feb. 28, 1931). The choice of the most suitable rubber for the press rolls plays an important part in the economic production of a paper machine, since it directly influences the life and efficiency of the expensive wet felt and in turn the cost of drying of the paper. On cylinder machines the rubber covered rolls have the advantage over the felt rolls in that the rubber rolls last much longer and also produce a smoother finished paper. The stock content is brought up from .5 per cent to 15 per cent at the wire, to 29 per cent at the presses and to 92 per cent bone dry at the dryers. After the sheet leaves the wire the presses remove 57 per cent of the remaining water and the dryers the other 43 per cent. The author shows by actual mill costs the great influence of removing as much water as possible at the presses. For a high speed machine, a hard rubber roll is the most suitable. Since the clothing cost of a machine is 60 per cent for the wet felts, the great importance of the correct rubber rolls is obvious, the rubber covering should be as soft as possible. For the manufacture of newsprint, the first roll has a softness of 70-75, the second 65-70 and the third press from 55-60.—J. F. O.

New crepe machine for kraft paper. Wochbl. Papierfabr, 62, No. 8, 179, (Feb. 21, 1931). A description of the machine is given, its mechanical details, economies, and advantages over other makes. It can operate at speeds of 80 to 100 meters per minute on paper of 70 grams per square meter.—J. F. O.

Knotter plates used in the manufacture of paper, whose slits on the under side of the plate change into grooves. Linkopings Armatur-och Metallfabriks Aktiebolaget, Sweden. Ger. pat. 502,731 (Feb. 14, 1928). The common distance between the slits is less than the corresponding grooves so that a number of slits is taken care of by the smaller number of grooves.—J. F. O.

Method for joining the ends of metal cloths or wires, especially used in the production of paper and pulp. Max Czaplinski, Berlin. Ger. pat. 503,312 (Aug. 17, 1928). The ends of the wire cloth are joined, the last weft threads are withdrawn. The purpose of the invention is to join the ends of the warp thread by means of welding or soldering and then using a thread for sewing up the joint.—J. F. O.

Metal cloth for paper machines. Richard Kastner, Steyrermuhl. Austria. Ger. pat. 506,409 (Dec. 18, 1927). The metal cloth is woven with a cloth binding in double or multiple ply, whereby the plies come in contact with each other. A weft surface is used in place of a double or multiple welt.—J. F. O.

Barking Drum for the Wet Removal of Bark from Wood Used in the Manufacture of Pulp. Glommens Mek. Versted A. S. Fredriksstad, Norway. Swed. pat. 70,276 (Feb. 4, 1929). The feature of the invention is the special form of the angle iron used in the inside of the drum, which form a three corner piece whose short side lies before the longer side in the direction of rotation of the drum.—J.F.O.

Process for the Filling of Digesters, Using the Special Filling Device. P. A. Fresk Robertsfors, Swed. pat. 70,288 (Sept. 1, 1928). The filling takes place under the action of steam or air. The stream of air is given a spiral motion in such a manner that it can escape from the digester during the filling.—J.F.O.

Arrangement for Joining Together the Ends of Screens Used on Cylinders for Taking Up Stock. H. N. Unden and F. L. Bolin, Sprangsviken. Swed. pat. 70334 (May 13, 1929). One of the ends of the screen coming in contact with the other end is made of a wider mesh wire than the other end.—J.F.O.

Arrangement for a Kollergang. Siemens-Schuckertp Werke A. G. Berlin. Nor. pat. 48,540 (Oct. 5, 1928). The kollergang can be automatically placed in dependence to a determined path or a determined time by a backward motion.—J.F.O.

The Effect Of Processing On The Number Of Ray Cells In Pulps And Stuffs*

By George J. Ritter,[1a] F. A. Simmonds[1b] and P. R. Eastwood[1c]

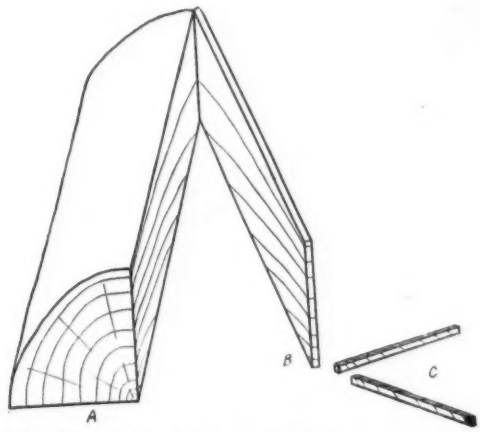
A previous article[2] pointed out that the number of ray cells in paper made from commercial wood pulp is considerably less than the number in the original wood. Further, substantially all the ray cells were retained in a pulp prepared from wood by the chlorination process. Not only were the strength-producing properties of such a pulp essentially the same as those of a "quick-cook" sulphite pulp, but its qualities indicated that the material may also be particularly suitable for the production of certain types of paper. Since any attempt to increase pulp yields by retaining the ray cells must be based upon a knowledge of the causes of their loss, the Forest Products Laboratory has planned to estimate the ray-cell content of pulps at the various steps in the conversion of wood to paper.

Material

Materials for the study consisted of two spruce sulphate pulps prepared with different concentrations of chemicals in a small (5.7-gallon) spherical rotary digester, and one longleaf-pine sulphate and one eastern hemlock sulphite pulp, both prepared in a semi-commercial (70 gallon) digester.

Experimental Procedure and Data

For the small-scale digestions the wood was chipped in a special way, illustrated in Fig. 1, to obtain a high percentage of unruptured ray cells, but for those of semicommercial scale the common type of chip was used.



Method of cutting chips for the rotary spherical digester. A. Flitch; B. Board; C. Chips.

To determine the effect of a comparatively low chemical concentration on the removal of ray cells from wood during digestion three pounds of the specially-cut chips from white spruce were digested with sulphate liquors at concentrations of 50 and 66 grams per liter, respectively; the remainder of the conditions are recorded in Table 1. A bundle of ray cells, photographed at a magnification of 275 diameters, shows the appearance of the cells more advantageously. (Plate I, C.)

* Presented at the fall meeting of the Technical Association of the Pulp and Paper Industry, Erie, Pa., Sept. 3-5, 1930.

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[1c] Formerly junior chemist, Forest Products Laboratory, Madison, Wis.

[2] Ritter, Seborg, and Simonds, "The Effect of Pebble-Mill Treatment on the Strength Properties of a Pulp Prepared by the Chlorination Method."

TABLE 1.—COOKING CONDITIONS USED IN THE PREPARATION OF THE EXPERIMENTAL PULPS

				Cooking chemical										Duration of digestion			
				Sulphite liquor				Sulphate liquor									
				SO_2			Concentration			Per 100 pounds oven-dry wood charged							
Type of digester	Kind of pulp	Digestion No.	Weight of oven-dry wood charged pounds	Free per cent	Combined per cent	Total per cent	NaOH grams per liter	Na_2S grams per liter	Total grams per liter	NaOH pounds	Na_2S pounds	Total pounds	Volume gallons	To maximum temperature, hours	At maximum temperature, hours	Maximum temperature, °C.	Total yield per cent
Spherical rotary	Sulphate	....	3.0	...	....	....	44.0	22.0	66.0	14.67	7.33	22.0	40.0	1½	2	170	46.7
Spherical rotary	Sulphate	....	3.0	....	....	....	33.3	16.7	50.0	14.67	7.33	22.0	52.8	1½	2	170	48.8
Semi-commercial	Sulphate	2295	100.0	....	....	....	53.3	26.7	80.0	13.33	6.67	20.0	30.0	1½	1½	170	47.9
Semi-commercial	Sulphite	3406-I	75.6	1.38	4.20	5.58	....	....	....	....	....	....	72.8	2½ to 115° 7 to 130°	3¼	130	47.9

TABLE 2.—THE ESTIMATED RAY-CELL CONTENT OF THE VARIOUS SAMPLES OF PULPS AND STUFFS

Plate No.	Sample	Kind of pulp	Source of sample	Estimated ray-cell content
I	A	Sulphate	Unwashed pulp from spherical rotary digester. Liquor concentration: 50 grams per liter	Most of the ray cells were retained
I	B	Sulphate	Unwashed pulp from spherical rotary digester. Liquor concentration: 66 grams per liter	Fewer ray cells present than in I—A
II	A	Sulphate	Unwashed pulp from blow pit	Many ray cells present
II	B	Sulphate	Washed pulp from blow pit	Many ray cells present but fewer than in II—A
II	C	Sulphate	Unbleached pulp from wet machine	Approximately the same number present as in II—B
II	D	Sulphate	Unbleached, beaten stuff	Approximately the same number present as in II—B
II	E	Sulphate	Unbleached, beaten, and Jordan-treated stuff	Approximately the same number present as in II—B
II	F	Sulphate	Unbleached, processed stuff after paper machine wire (wet broke)	Fewer ray cells present than in II—A to E inclusive
III	A	Sulphate	Bleached, unbeaten stuff	Fewer ray cells present than in II—C
III	B	Sulphate	Bleached, beaten stuff	Fewer ray cells present than in III—A
III	C	Sulphate	Bleached, processed stuff after paper machine wire (wet broke)	Fewer ray cells present than in III—B
IV	A	Sulphite	Unwashed pulp from blow pit	Many ray cells present but fewer than in I—A
IV	B	Sulphite	Washed pulp from blow pit	Many ray cells present but fewer than in IV—A
IV	C	Sulphite	Unbleached pulp from wet machine	Approximately the same number present as in IV—B
IV	D	Sulphite	Unbleached, beaten stuff	Approximately the same number present as in IV—B
IV	E	Sulphite	Unbleached, beaten and Jordan-treated stuff	Approximately the same number present as in IV—B
IV	F	Sulphite	Unbleached, processed stuff after paper machine wire (wet broke)	Fewer ray cells present than in IV—A to E inclusive
V	A	Sulphite	Bleached, unbeaten stuff	Fewer ray cells present than in IV—C
V	B	Sulphite	Bleached, beaten stuff	Fewer ray cells present than in V—A
V	C	Sulphite	Bleached, beaten, and Jordan-treated stuff	Fewer ray cells present than in V—B
V	D	Sulphite	Bleached, processed stuff after paper machine wire (wet broke)	Fewer ray cells present than in V—C

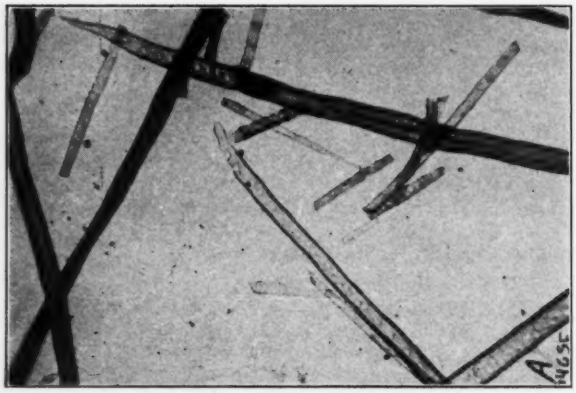

PLATE I. A. Sulphate pulps illustrating the effect of chemical concentration on the ray-cell content of pulps. A chemical concentration of 50 grams per liter.

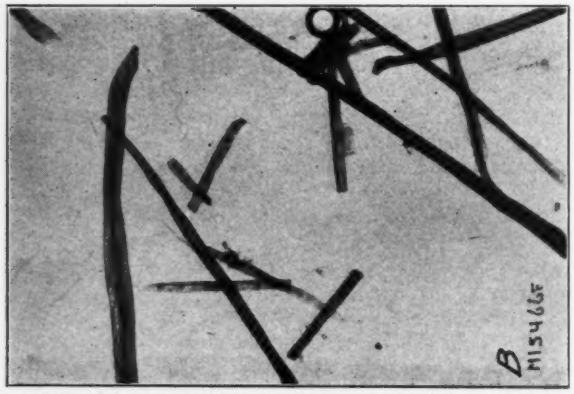

PLATE I. B. Sulphate pulps illustrating the effect of chemical concentration on the ray-cell content of pulps. A chemical concentration of 66 grams per liter.

PLATE I. C. Sulphate pulps illustrating the effect of chemical concentration on the ray-cell content of pulp. Bundle of ray cells magnified 275 times.

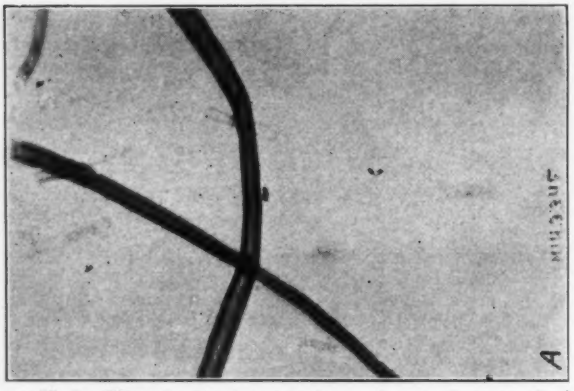

PLATE II. A. Effect of mechanical processing on the ray-cell content of sulphate pulp and stuff. Unwashed pulp from blow pit.

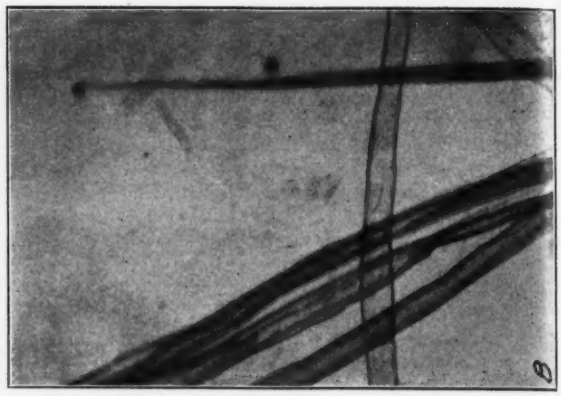

PLATE II. B. Effect of mechanical processing on the ray-cell content of sulphate pulp and stuff. Washed pulp from blow pit.

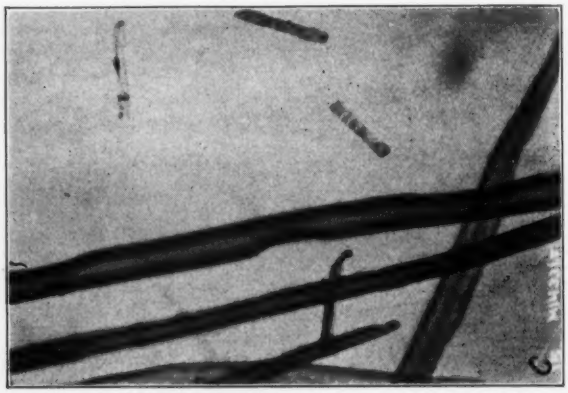

PLATE II. C. Effect of mechanical processing on the ray-cell content of sulphate pulp and stuff. Unbleached pulp from wet machine.

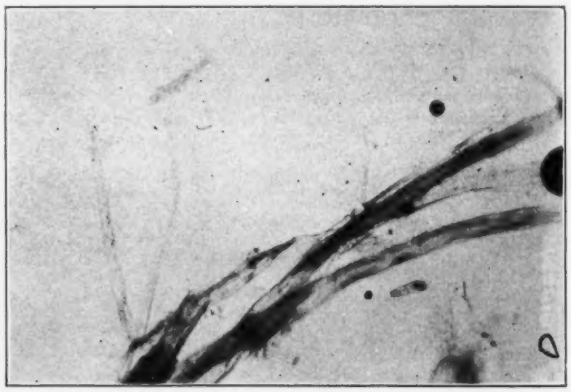

PLATE II. D. Effect of mechanical processing on the ray-cell content of sulphate pulp and stuff. Unbleached, beaten stuff.

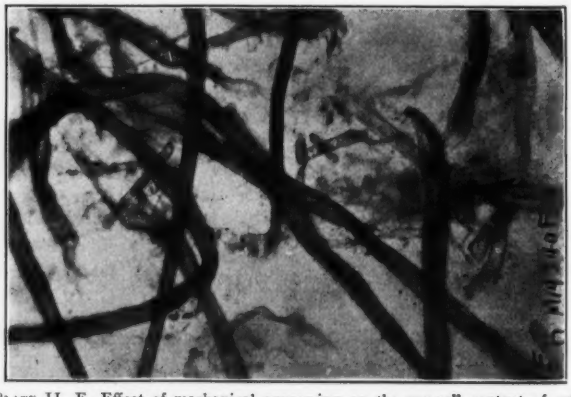

PLATE II. E. Effect of mechanical processing on the ray-cell content of sulphate pulp and stuff. Unbleached, beaten and Jordan-treated stuff.

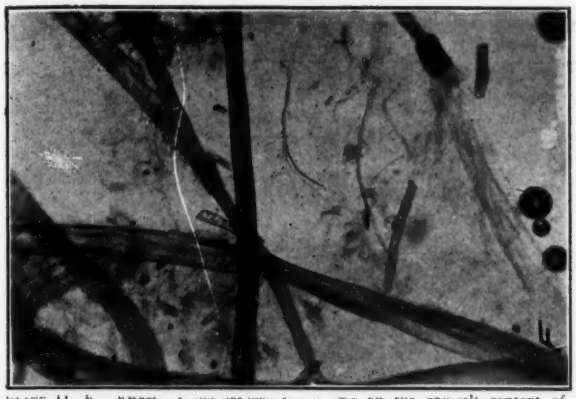

PLATE II. F. Effect of mechanical processing on the ray-cell content of sulphate pulp and stuff. Unbleached, processed stuff after paper machine wire (wet broke).

PLATE IV. A. Effect of mechanical processing on the ray-cell content of sulphite pulp and stuff. Unwashed pulp from below pit.

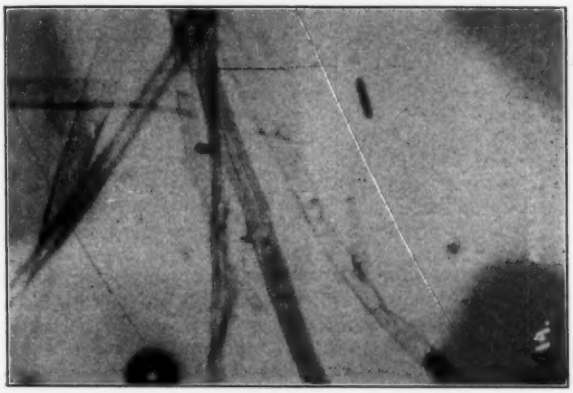

PLATE III. A. Effect of chemical and of mechanical processing on the ray-cell content of sulphate pulp and stuff. Bleached, unbeaten stuff

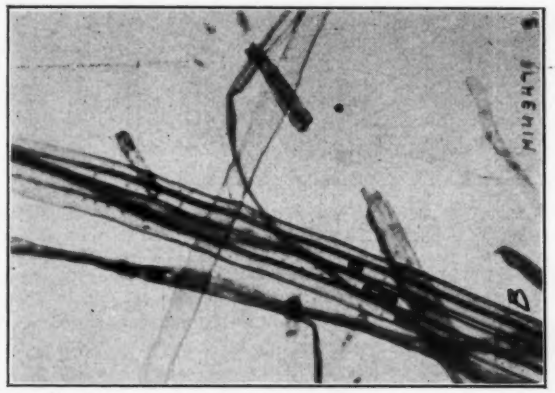

PLATE IV. B. Effect of mechanical processing on the ray-cell content of sulphite pulp and stun. Washed pulp from blow pit.

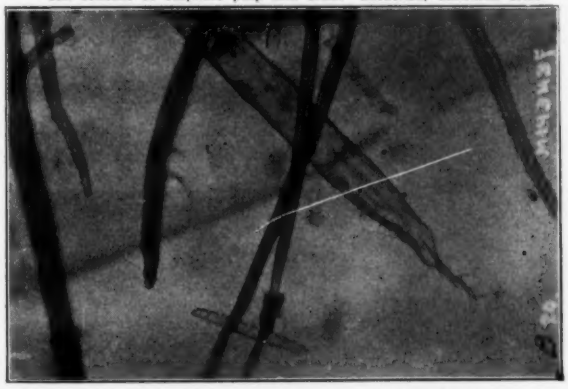

PLATE III. B. Effect of chemical and of mechanical processing on the ray-cell content of sulphate pulp and stuff. Bleached, beaten stuff.

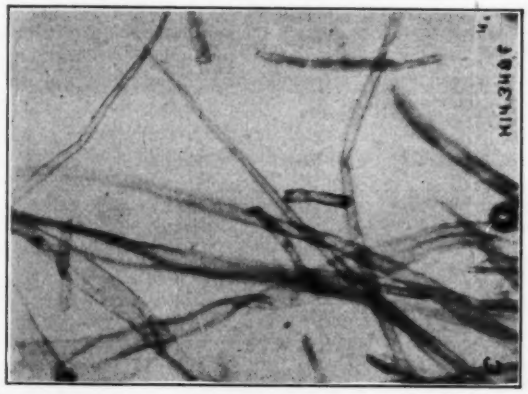

PLATE IV. C. Effect of mechanical processing on the ray-cell content of sulphite pulp and stuff. Unbleached pulp from wet machine.

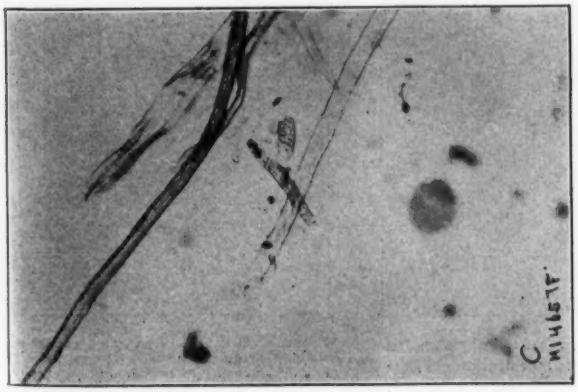

PLATE III. C. Effect of chemical and of mechanical processing on the ray-cell content of sulphate pulp and stuff. Bleached, processed stuff after paper machine wire (wet broke).

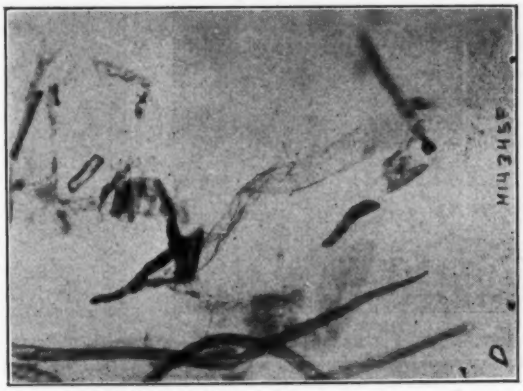

PLATE IV. D. Effect of mechanical processing on the ray-cell content of sulphite pulp and stuff. Unbleached, beaten stuff.

PLATE IV. E. Effect of mechanical processing on the ray-cell content of sulphite pulp and stuff. Unbleached, beaten and Jordan-treated stuff.

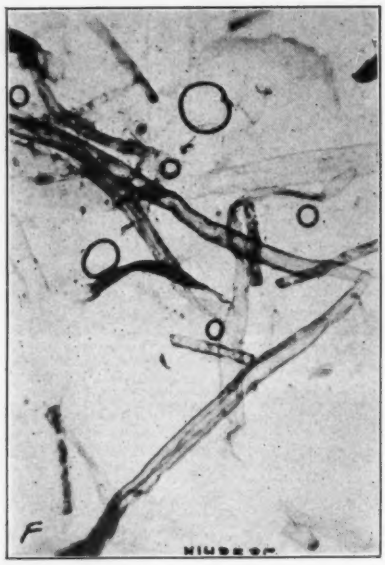

PLATE IV. F. Effect of mechanical processing on the ray-cell content of sulphite pulp and stuff. Unbleached, processed stuff after paper machine wire (wet broke).

PLATE V. A. Effect of chemical and of mechanical processing of the ray-cell content of sulphite pulp. Bleached, unbeaten stuff.

The easily bleached sulphate and sulphite pulps were used for the determination of the effects of mechanical and of chemical processing on the ray-cell content of the pulps and stuffs resulting from the various treatments of the conversion process. They were sampled for microscopical examination, the results of which, as well as the source of the sample, are recorded in Table 2. Photomicrographs of the samples are shown in Plates II to V, inclusive. These photomicrographs give only semiquantitative results, since each represents the appearance of a restricted field of a microscopic slide prepared from a sample of pulp. The more quantitative results were obtained by a microscopical examination of many samples.

Interpretation and Discussion of Results

An example of the effect of concentration of chemicals on the ray-cell content of the resulting pulp was afforded by the two small-scale sulphate digestions made from white spruce. When the concentration of chemicals was increased from 50 to 66 grams per liter a decrease occurred in the ray-cell content of the pulp, which can be seen by comparing A and B of Plate I. This effect may be ascribed to the fact that the ray cells have thin, fragile walls, some of which may dissolve in the increased concentration of chemicals or become so weakened as to disintegrate beyond recognition during the maceration of the cooked chips.

When the pulps were washed in the blow pit a small number of ray cells were lost through mechanical means, although treatment in the beater and the Jordan had little effect on the ray cells of the unbleached pulp. Plates II and IV, A to E inclusive, illustrate these observations. When the stock was passed over the

PLATE V. B. Effect of chemical and of mechanical processing on the ray-cell content of sulphite pulp. Bleached, beaten stuff.

PLATE V. C. Effect of chemical and of mechanical processing on the ray-cell content of sulphite pulp. Bleached, beaten and Jordan-treated stuff.

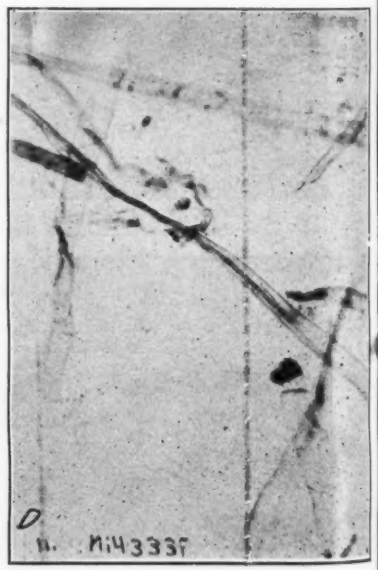

PLATE V. D. Effect of chemical and of mechanical processing on the ray-cell content of sulphite pulp. Bleached, processed stuff after paper machine wire (wet broke).

Fourdrinier machine, however, more ray cells were lost; they were carried through the wire cloth. This is shown in Plates II, F and V. F.

Bleaching destroys some of the ray cells and renders the remainder more susceptible to destruction by mechanical processing. Samples of stuffs showing these effects are pictured in Plates III and V.

Conclusions

1. An increase in the concentration of chemicals in a sulphate cooking liquor, for example, causes a decrease in the ray-cell content of the resulting pulp.
2. Washing a pulp in the blow pit slightly reduces its ray-cell content.
3. Ordinary mechanical processing has little effect on the ray cells, other than a possible slight reduction in their size.
4. In commercial operations the largest number of ray cells are probably lost through the wires of the wet machines, thickeners, or screens, being carried away with the white water. A closed white water system would prevent some of this loss.
5. Bleaching destroys a certain percentage of the ray cells and renders the remainder more susceptible to disintegration by mechanical processing.

Pebble-Mill Treatment Effect on the Strength Properties of a Pulp Prepared by Chlorination *

By George J. Ritter,[1a] F. A. Simmonds[1b] and R. M. Seborg[1c]

Although pulpwood has a potential yield of cellulose of approximately 60 per cent, upwards of one-quarter is lost by most of the chemical pulping processes now in use. The cellulose of interest here, known as cellulose prepared by the chlorination process, is the residue remaining when moist wood has been treated successively with chlorine gas and a dilute solution of sodium sulphite. Numerous attempts have been made from time to time to adapt the chlorination process to the commercial pulping of woods, and so retain this potential yield, but all have at best been only indifferently successful. Presumably this lack of success has been partly due to the costs involved and partly to the quality of the pulps produced. A search of the literature has failed to disclose much information on the paper-making qualities of a pulp that is comparable with the delignified residue obtained by the chlorination process.

In comparing commercial pulps with cellulose prepared by the chlorination method, the microscope made especially noticeable the absence of ray cells. Soda pulps, for example, contain fewer ray cells than the original wood and the finished papers contain even less than the pulps.[2] In addition, the ray-cell content of an overcooked soda pulp is less than that of one resulting from a mild digestion. Further, refined sulphite pulp contains very few ray cells.[3] These observations all indicate that a part of the loss in pulp prepared by a commercial process is due to a loss of ray cells through chemical and mechanical treatments. A greater saving of ray cells appeared desirable. On the other hand, any increase in the yield of pulp is of value only if the constituents that will maintain the desirable properties of the material for paper-making purposes are retained in the pulp. The Forest Products Laboratory accordingly undertook a study of the combined effect that the ray cells and the easily hydrolyzed carbohydrates have upon the physical properties of test sheets of pulp, beginning with the preparation of a pulp by a modification of the Cross and Bevan method for isolating total cellulose.

Methods of Experimentation

Material

White spruce in the form of shavings was selected as the source of cellulose. The wood was obtained from barked, seasoned logs.

Experimental Procedure and Data

To facilitate chlorination on a laboratory scale, thin shavings were necessary. In order to obtain a high percentage of unruptured ray cells from such shavings, they were cut from the radial faces of quartered blocks of the wood. After extraction with a solution of alcohol and benzene, the moistened shavings were treated with gaseous chlorine for 10 minutes, and further extraction with a 2 per cent solution of sodium sulphite, in a boiling water bath, then followed. The chlorine and sulphite treatments were repeated until the residue showed no pink coloration when in contact with the sodium sulphite solution. The final residue, a yield of cellulose of 58.0 per cent of the original wood, had a large ray-cell content.

For the purpose of processing the cellulose residue an Abbé pebble mill was employed in accordance with standard procedure No. 101 of the Forest Products Laboratory. This method employs a mill charge of 0.09 kg. of oven-dry fiber, 2 kg. of water, and 4.5 kg. of pebbles at a speed of 60 r.p.m. The resulting stuff and the unmilled pulp were made into test sheets that were formed on thin woolen felts over a wire cloth to prevent the loss of the finely divided cellulose particles, especially those from the ray cells.

Results of the strength tests made on these samples are recorded in Table 1. Photomicrographs of the unprocessed pulp and of the portions milled for 20 and 60 minutes, respectively, are shown in Plate I.

Interpretation and Discussion of Results

Since the qualities of a pulp are largely dependent upon the cooking conditions employed, caution must be exercised in comparing the strength properties of a pulp prepared by the chlorination process with those of the different commercial pulps. A given sulphite pulp, for example, may be either a "quick-cook" or a Mitscherlich type; it may have been cooked either for strength or for easy bleaching. After mechanical processing the strength properties of such pulps vary widely; maximum values of the

TABLE 1

EFFECT OF PEBBLE-MILL TREATMENT ON THE STRENGTH PROPERTIES OF WHITE-SPRUCE CELLULOSE PREPARED BY THE CHLORINATION METHOD

Yield, per cent	Time in pebble mill, minutes	Strength properties: Bursting-strength factor, points per pound per ream *	Tearing-strength factor, points per pound per ream *	Folding endurance, number of double folds	Tensile strength, meters
58	0	0.70	1.22	77	3,740
	20	0.95	1.10	231	4,905
	40	0.96	0.90	304	5,725
	50	1.02	...	...	...
	60	1.05	0.89	248	5,355

* Standard ream: 24 x 36—500.

* Presented at the fall meeting of the Technical Association of the Pulp and Paper Industry, Erie, Pa., Sept. 3-5, 1930.

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[1c] Junior chemist, Forest Products Laboratory, Madison, Wis.
[2] Surface, H. E. "Production of Soda Pulp from Aspen," U. S. Dept. Agric. Bul. 80.
[3] Griffin, G. J. Unpublished data. Forest Products Laboratory.

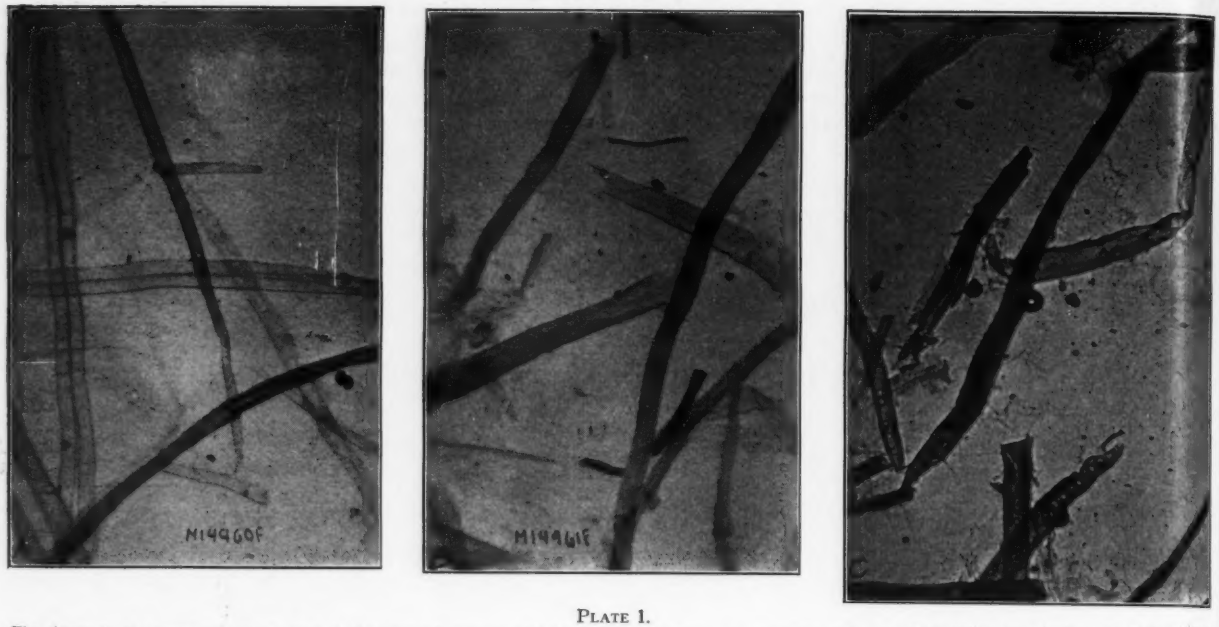

PLATE 1.

The change in the appearance of the pulp of high ray-cell content with the degree of milling. A. Unmilled Pulp. B. Pulp Milled 20 minutes. C. Pulp Milled 60 minutes

TABLE 2
EFFECT OF PEBBLE-MILL TREATMENT ON THE STRENGTH PROPERTIES OF THREE TYPICAL "QUICK-COOK" SULPHITE PULPS PREPARED FROM WHITE SPRUCE

Digestion No.	Cooking time, hours	Yield, per cent	Time in pebble mill, minutes	Strength properties: Bursting-strength factor, points per pound per ream*	Tearing-strength factor, points per pound per ream*	Folding endurance, number of double folds	Tensile strength, meters
3411	8½	54	20	0.94	2.10	682	4,255
			40	1.01	1.86	797	4,900
			60	1.30	1.81	1,440	5,905
			80	1.26	1.78	1,267	6,170
3415	9	47	20	0.66	2.12	87	2,741
			40	0.90	2.11	473	3,849
			60	1.04	1.85	473	4,250
			80	1.00	1.85	554	4,252
3417	9	45	20	0.40	1.83	13	2,156
			40	0.60	1.87	56	2,735
			60	0.66	1.88	155	2,925
			80	0.63	1.60	254	3,400

* Standard ream: 24 x 36—500.

bursting strength factor on test sheets range from 0.60 to 1.5 points per pound per ream.

If such comparison is confined to the easily bleached "quick-cook" type of sulphite pulp, however, the bursting and tensile strengths of the "chlorination" pulp, after development by mechanical processing, are approximately of the same order of magnitude as those of the commercial pulp, whereas the tearing strength and the folding endurance are lower. These comparisons are drawn from the data presented in Table 2. The opacity of test sheets prepared from the "chlorination" pulp is decreased about 30 per cent more rapidly during milling than that of the test sheets made from the "quick-cook" type of sulphite pulps listed in Table 2. This suggests the suitability of "chlorination" pulp for the production of greaseproof and glassine papers. The difference in the resistance to milling of this pulp seems to be due to the presence of both the more fragile-walled ray cells, some of which disappear during milling, and the more easily soluble carbohydrates, which are removed by the acid pulping process. Test sheets made from stuff milled for 20 minutes had more of a rag-stock feel than those made from the comparable sulphite stuffs. Further, the sheets prepared from the unmilled "chlorination" pulp of high ray-cell content possessed a harder surface than those of an unmilled normal "quick-cook" sulphite. Also, a possible important advantage of the chlorination process may be that it delignifies the wood and bleaches the resulting pulp simultaneously.

Conclusions

A study of the effect of processing, by means of a pebble mill, on the strength-producing properties of a pulp prepared by the chlorination process afforded the following conclusions:

1. A yield of 58 per cent of desirable papermaking material can be prepared by the chlorination process from white spruce.
2. Cellulosic materials isolated by the chlorination process contain a high percentage of the ray cells originally present in the wood.
3. The presence of ray cells and the easily hydrolyzed carbohydrates appears to have no deleterious effect on the strength-producing properties of the pulp.
4. Pulps containing a high ray-cell content and the easily hydrolyzed carbohydrates are more easily "hydrated" by pebble-mill treatment than pulps prepared by the sulphite process. Such a pulp is deemed a suitable material for the production of certain types of paper, such as greaseproof and glassine.
5. Pebble-mill treatment destroys a small percentage of the ray cells.

Study of M.I.T. Folding Tester

A study of the M.I.T. paper folding tester is being made by the Bureau of Standards to assist in the standardization of this type of folding instrument. This study was requested by both the subcommittees on Insulating Paper of the American Society for Testing Materials, and the Paper Testing Committee of the Technical Association of the Pulp and Paper Industry. In this type of tester, one end of the test specimen is held in an oscillating clamp, the jaws of which are tapered to rounded edges, and the other end is held in a clamp to which a measured tension is applied by means of a spring.

The folding endurance values of six different types of paper have been obtained with five testers loaned by users of them. The results obtained with the different instruments varies considerably but no definite statement can be made at present as to the chief cause. The static friction of the upper clamp was found to be quite uniform when the plunger part was clean and well oiled, but some variables noted in the jaws of the oscillating clamps of the different instruments were width of jaws, condition and eccentricity of the jaw edges, and speed of rotation. Further study of the effect of each of these variables is to be made.

Section of the

COST DEPARTMENT

of the

American Paper and Pulp Association

Edited by T. J. Burke C. A. Director Cost Dept.

About Selling Costs*

By Carle M. Bigelow[1]

Up to about 1890 a factory superintendent or manager just knew about how to manufacture. The design of most products depended principally upon the whim or opinion of the designer.

Pumps were commonly decorated with dolphins and mermaids and engines with flying horses, gold stripes and gorgeously colored pictures varying from the underdraped le form to the beauties of Niagara adorned the flanks of old Corliss engines.

Equipment was purchased largely for stability and reasonable price, rather than in terms of low performance cost, now easily determinable by the formulae. It was usually run until it fell apart, rather than being maintained by predetermined repairs or replaced by more efficient apparatus.

Workers were hired at the lowest possible wages, worked hours ... than it was possible for them to work at a reasonable rate of efficiency, under atrocious conditions and an incentive wage to stimulate them was beyond consideration.

Control of Policy and Method

Scientific management, mass production, inventive genius, engineering and science have changed this "know-how" or intuition, or just plain ignorance, into the precise control of policy and method which are almost universal throughout manufacturing plants in our country today. Manufacturing costs have been lowered consistently and quality steadily improved. For instance, compare the $1,000 automobile of today with the $5,000 car of fifteen ago.

n fail to remember the bitter years of struggle during which scientific management was first developed and the tremendous amount of research which has gone into making possible this result.

On the other hand, relatively little thought or research was applied to merchandising until the period just after the World War, and I think that it is fair to say that the majority of this research has been contributed by the advertising profession. Naturally this effort has been very largely directed toward the development of their own particular merchandising function and considered largely from the promotional, rather than the management, as is perfectly natural.

If only one person in the world died annually from cancer, the huge sums being spent to endeavor to find a remedy for this malignant disease would not be appropriated. It is only natural that research is not applied until the necessity is urgent.

Through mass production we discovered the law of increased distribution by decreased prices. Naturally our efforts have been turned largely toward producing greater quantities and a greater variety of goods at lower prices.

Many eminent individuals still believe that if we would only produce enough goods at sufficiently low prices the tremendous upward swing of business which held generally from 1925 through 1929 could be carried on still further.

During the post-war years, when production demand fell off, we found that in most cases promotional activity could restore the demand. For eighteen months, however, we have been out of balance, with prices shooting down with tobaggan speed, with all types of promotional activities crashing at us, but consumption demand does not respond. We have been brought up sharply with the fact that after all we do not know very much about distribution.

We are beginning to realize that low prices and promotional effort will not distribute an unlimited amount of commodities.

Psychological Buying Trend

The growth of the country in terms of population is not as great as it was formerly. While our population is still increasing, it is not increasing as rapidly as formerly. But more influential than this is the great psychological buying trend of the people, expressing their desires for those things which give them a cultural or sensory satisfaction, even at the expense of the limitation of the necessities.

The motto, "Give us our luxuries; we will get along without our necessities", is not a hollow wise crack. It is the expression of a great ferment within the minds of our people. We see a great mass development of cultural uplift in the rapidly growing appreciation of city planning, finer architecture, recreation, etc.

For several generations almost any business could be successful which originated a product, produced it in sufficient quantities to get its price down to an economic level, and then applied a large amount of promotional activity. Today our first consideration must be not with the creation of the product and its production and promotion, but in determining what the buying public wants.

Thirty years ago, a machine shop very commonly figured

* Class and Industrial Marketing

[1] President, Kent, Willard & Co., Boston, Mass.

CHART 1

Annual Sales per Customer	No. of Accts.	Sales	Selling Expense Amount	%	Profit + or Loss — Amount	%
$50,000	9	$639,822.11	$71,020.26	11.1	$95,333.49	+14.9
10,000-$50,000	26	963,021.62	131,933.96	13.7	118,451.66	+12.3
1,000- 10,000	186	1,119,637.34	261,995.14	23.4	29,110.57	+ 2.6
1- 1,000	811	321,461.19	119,583.56	37.2	36,003.65	—11.2
Total	1,032	$3,043,942.26	$584,532.92	19.2	$206,892.07	+ 6.8

CHART 2

No. of Accts.	Sales	Selling Expense Amount	%	Profit Amount	%
322	$2,286,717.83	$322,427.21	14.1	$221,811.63	9.7

its total manufacturing cost divided by the pounds of various products as a standard cost per pound to manufacture. Based upon this, they often set a mean price of $4 a pound, varying it somewhat, of course, in terms of competition, but generally figuring that $4 a pound was a sound mean price. As a result, some businesses prospered tremendously, others failed miserably, with little knowledge as to why.

Today we are becoming dissatisfied with our too similar methods of estimating, selling and distribution costs.

Still Darkest Africa in Many Lines

The costing of selling expense is still Darkest Africa in most businesses. Many concerns still figure their entire selling expense divided by their entire sales as giving a fixed percentage of selling expense. A manufacturer of a simple machined product asked us to determine why his sales expense (19.2 cents of the sales dollar) was so high and his profit (6.8 cents of the sales dollar) was so low. Analysis revealed the information shown in Chart 1.

It will be noted that while the first 35 accounts, making up over a little more than half the business, made a very excellent profit return, that the selling expense on the 997 other accounts was so high that little profit was shown on 186 of them, and 811 accounts resulted in a definite loss of 11.2 cents of the sales dollar.

Of course, it is impossible to eliminate all unprofitable accounts. In this particular case, however, many were eliminated, with the result that during the subsequent period only 322 accounts were sold. While this reduced sales by approximately three-quarters of a million dollars a year, selling expense was reduced from 19.2 to 14.1 cents of the sales dollar, while net profits increased from 6.8 cents to 9.7 cents, or an increase of $15,000 in net profits. Incidentally, some $350,000 of capital employed was eliminated from the business. The exact figures are shown in Chart 2.

When one considers that in many businesses it costs $3.50 for a salesman to make a call and about $2 to service an order from the time it is received until the collection is made and banked, we see how impossible it is to make profits on a customer with gross sales of $50 a year on whom we make twelve calls at a cost of $42 and obtain six orders, which cost us $12 to service, or a total of $54 in direct selling expense and order service.

You may say that is absurd, but I have examined account profitability of a great many concerns and have found many worse examples than the one just given. Taking an average business, with 50 salesmen covering the concentrated industrial area of the country, it is very rare when we find that an adequate profit is returned on over half of their sales. By the inadequate costing of selling and the throwing together and prorating of selling expense, such facts are lost sight of.

Another Phase of Costing

Another phase of costing where proration often misleads as to facts is the setting up of selling expense for branch offices or sales centers. In most concerns, because of the common use of commission plan of payment for direct sales, direct selling expense is fairly constant between different branches. Promotional, advertising and general sales supervision expense, however, varies tremendously, but is usually spread as a flat percentage. For instance, analyzing the effectuality of sales centers for a certain concern the facts shown in chart 3 were discovered.

It will be noted that the variation between profitability between these different branches only varies from 7.1 to 7.9 per cent. Applying proper costing methods, however, to the selling expense of this organization, the figures shown in chart 4 were obtained:

It will be noted that two branches are quite profitable, returning 10.7 and 10 cents, respectively, of the sales dollar; another returns 6.7 cents of the sales dollar, while the last two return but 2.6 and 1.4 cents, respectively.

Until we devise costing methods for every phase of selling activity—differentiated or graded for depths of penetration and volume by territories, by sales areas, and in some cases by different products where more than one product is sold—as accurately as production costs are figured in well-organized plants—we shall not have the basis of facts and figures for properly determining our merchandising or selling plans, nor any sure control of selling expense.

Virtually Valueless Statistics

Most of the statistics as to the cost of distribution at the present time, because of the lack of proper segregation, set-up and comparison with conditions, are virtually valueless. We see them printed—4 and 5 cents of the sales dollar is an average advertising cost. If, on the other hand, you examine the figure averaged up to get the determinations you will find they vary from the concern that spends ten cents of the sales dollar down to the one that does no advertising at all. Not using a differentiation of the conditions existing in each of those concerns makes those facts unsatisfactory and unreliable.

The necessity for establishing facts and figures in setting up merchandising programs is doubly essential, due to the fact that the selling phase involves so many more intangibles than does the production phase.

Probably one of the greatest intangibles in a merchandising program is the proper correlation between cause and effect, or between cost and resultant sales for various advertising endeavors. It has been skilfully met in some cases by the use of testing methods whereby under carefully controlled conditions results have been evaluated in terms of effort. I believe that through the development of such methods and others which management genius will devise at some time in the future it will be possible for us, within relatively definite limits, to predict the results of an advertising expenditure.

CHART 3

Sales Center	Net Sales	Manufacturing Cost	Commercial Cost	Operating Profit Amount	Operating Profit % of Sales Dollar
A	$780,891	$530,225	$188,880	$61,786	7.9
B	636,480	432,170	158,210	46,100	7.2
C	540,205	366,799	134,431	38,975	7.2
D	377,074	256,033	94,137	26,904	7.1
E	339,634	230,612	84,890	24,132	7.1
Totals	$2,674,284	$1,815,839	$660,548	$197,897	7.4

CHART 4

Sales Center	Gross Profit as Before	Commercial Cost	Operating Profit Amount	Operating Profit % of Sales Dollar
A	$250,666	$166,959	$83,707	10.7
B	204,310	140,705	63,605	10.0
C	173,406	137,453	35,953	6.7
D	121,041	111,282	9,759	2.6
E	109,022	104,149	4,873	1.4
Totals	$858,445	$660,548	$197,897	7.4

A scientific approach cannot be made to any problem unless there exists a definite procedure for measuring cause and effect, and their various relations. The application of the scientific viewpoint to merchandising will not mean any loss in the art of application. No system or method ever ran a plant effectually. Trained skilful management is essential, but management, which can lay out its plans upon a basis of scientific fact, will go farther than any genius working along intuitive lines.

Must Start with Proper Knowledge

Every merchandising plan must start with proper knowledge of the market to which it is to distribute a product or products. This knowledge is not sufficient when there is known simply the total market. There must be evaluated the influence of competitive activity, the effect of varying depths, seasonal effects, and above everything, knowledge as to that part of the market, which can be sold with an economic selling expense.

When we realize what a true "economic market" is, we shall do away with the "volume complex", which is responsible to a very large degree for the depression which we have just passed through. While by and large, an increase in sales decreases manufacturing expense, this does not hold true in many cases as related to selling expense. This increase of sales, instead of increasing profits, if made in an uneconomic manner, may actually decrease profits. It is fully as important for us to know what not to sell as it is to know what to sell. Profitability depends very largely upon depth of penetration. Certain markets are too thin to sell economically.

For instance, a concern may sell a million dollars of goods, with a selling cost of 20c of the sales dollar and because of this high selling cost decide that they must increase their volume. The addition of two million dollars more sales, or a total of three million, may reduce the selling expense to 15c of the sales dollar, while the addition of two more million, bringing the total up to five million, because of thinner markets covered, may bring the selling expense back to 20c of the sales dollar, while the addition of another two million dollars of sales, or a total of seven million dollars may result in an increase of selling expense to 30c of the sales dollar and make the enterprise entirely uneconomic.

In one case in actual experience a concern had practically saturated its market, and a program, which resulted in only 12 per cent additional sales, doubled the previous selling expense.

Proper costing of selling expense will do a great deal to prevent the evils of the "volume complex."

Strategy Factor Must Be Considered

In all plans of merchandising, the strategy factor must be considered. If one is to plan to handle a situation, where every influencing factor is under control, a rigid plan may be safely made and adhered to. In selling, however, there exists the constant fluctuation of consumer acceptance, and above everything else, the varying effect of competitor activity. Planning and conducting a sales plan is like operating a campaign in warfare. The plan must be flexible and subject to prompt and timely revision. Military students tell us that the first battle of the Marne was lost by the Germans because their troops operated under fixed orders. They proposed to work an encircling movement about the French and English forces. Because of heavy resistance on their flanks and light resistance against their center and lack of liaison to keep the relative movements of troops established, they ultimately found themselves not encircling the enemy, but encircled by the enemy, the relative positions of their flanks and center being reversed from the preconceived plan. They did not allow for the variable effect of the enemy. In selling, this strategy factor must always be borne in mind and plans revised to meet changing conditions. Facts and figures as to current results are the liaison, which enables the sales manager to change his strategy promptly.

Major Steps Involved

A complete merchandising plan, defining merchandising as "the consumation of sales at an adequate profit", including advertising, which is one of the great sales tools, must involve the following major steps, most of which, it will be noted, are factual in nature.

1—A product with proper user and consumer appeal, with certain features where possible, providing at least talking points as to superiority over competing products.

2—Knowledge of market, including: total, competitive influences, territorial depths, seasonal influences, and prospect lists graded to eliminate uneconomic accounts, those controlled by competitors, or where it is impossible to render service equal to that of a competitor.

3—Definite program for promotional and sales activities to cover the economic section of the market selected. Each step of this phase should be carefully costed in terms of varying depths and conditions of the market, and in terms of successive steps of volume increase. Advertising is one phase naturally included under this section. In setting up the advertising program the first requirement is to determine the definite purpose of advertising and the specific result it is desired that it should accomplish at a definite cost. Only when a definite task for advertising is defined and the effort scheduled and results measured, can advertising be utilized intelligently.

4—The production program must be set up to provide the necessary volume of sales at the proper times.

5—The financial program must be set up to finance properly with the minimum capital requirements both the production and sales programs.

6—All phases must be consolidated in a budget built up on the foundation of the expected sales results showing the breakdown of the sales dollar for every item of cost and expense, with resultant profit calculated to give an adequate return on the capital employed.

7—The last step of the merchandising problem is to establish control methods which show periodically a comparison of actual costs, expenses and results against budgeted costs, expenses and results.

New Jones Speed Reducers Catalog

The W. A. Jones Foundry and Machine Company, of 4401 Roosevelt Road, Chicago, Ill., has just published a bulletin describing the use of speed reducer drives on the paper machine. The Herringbone speed reducer is used in the paper industry for the heavier duty work requiring medium ratios where larger motors are employed. Typical paper plant applications include drives for rod mills, conveyors, elevators, wet machines, coal handling equipment, paper machine, etc.

The Spur is used in the paper industry for medium duty work where the load is fairly smooth, even and uniform; for medium sized motors where large ratios are required. The Worm is used in the paper industry for installations requiring a right angle drive; where silent operation is essential and high efficiency in heavy, shock and peak loads is required. The bulletin also contains numerous illustrations of paper mill installations.

Resale Price Maintenance

The following court decision describes the line of demarcation between legal and illegal price maintenance.

Appealed Case—Resale Price Maintenance: The Sixth Circuit Court of Appeals has just sustained the first section out of three in Federal Trade Commission Order No. 1719 (Shakeaspeare Company v. Federal Trade Commission). The other two parts of the order were vacated. The Shakespeare Company manufacturers and sells fishing rods, reels, lines and other tackle. The company assailed the Commissions' order before the Court on the ground that it was not supported by substantial evidence.

The first part of the order required the company to cease from entering into agreements or understandings with its customers to sell at the suggested prices. The record showed several instances in which the company had refused to fill orders except upon assurance of the customer that he would discontinue selling below the suggested prices. Instances were also found of the refusal of the company to make further shipments on orders until such assurance was given. Upon assurance being given, the orders for merchandise were accepted. To this the Court said, in part: "Thus, while the petitioner had the right to refuse to sell its goods to those who did not sell them at the suggested resale prices, with the further right, we think, to state to them its reasons for so doing, the evidence referred to shows that it put into practice 'a system of cooperative effort.' within the meaning of that part of the decision in Pipe Threading Machine Company v. Federal Trade Commission, 11 Fed. (2nd) 337 (6 C. C. A.) upholding the order of the Commission in so far as it required the manufacturer to desist from requiring dealers placing orders to give assurance that they would be governed by the suggested resale prices as a condition precedent to the acceptance of the order." The Court held this equivalent to the company entering into illegal understandings with its customers to maintain prices but added: "Our approval of this first section of the Commission's order, however, is subject to certain explanatory limitations. The line of demarcation between the permissible and the prohibited, under principles already suggested, is indistinct and rather baffles definition. Perhaps it might be said that those contracts, or those cooperative efforts, which fall within the inhibition of the law, relate primarily to the fixing of prices for goods already in the hands of jobber or retailer, rather than to a refusal by the manufacturer to make further sales to those who cut prices. In this connection we are of the opinion that the petitioner, under the Commission's order, may refuse to sell to those customers who demoralize the market and may anonunce as its general policy an intention so to do. If some customer cuts prices below the requested minimum the petitioner may refuse to make additional sales to such customer, but may go no further. Assurances as to future conduct may not be solicited. Should such assurances be given by the customer, notwithstanding the lack of solicitation, they must be considered as gratuitous and as not involving the petitioner in a violation of the Commission's order. They would then amount to no more than persuasion on the part of the customer that the petitioner resume its former relations."

The second part of the order, which the Court reversed, directed the company to cease asking its dealers to report the names of price cutters. It appears that the company received a number of letters from customers about price cutting, to which it replied with thanks and the information that goods would not be sold to price cutters. No general request was sent to dealers asking for names of price cutters and the only evidence on this point consisted of the company's responses to letters of information in which the company merely expressed thanks. The Court said: "None of these letters * * * can be said to amount to a request that the dealer report to the petitioner the names of other dealers who did not maintain the suggested prices. Contrarily the evidence shows * * * that petitioner never made such request to any dealer."

The third part of the order the Court found too incomplete to be intelligible. It required the company to cease "seeking by any methods and cooperation of dealers in making effective any policy adopted by respondent for the maintenance of prices."

C. S. Hartwell Leaves Paper Industry

[FROM OUR REGULAR CORRESPONDENT]

BOSTON, Mass., September 8, 1931.—Claude S Hartwell, of Carter Rice & Co. Corporation of Boston, has announced his severance of all connection with the paper industry and the opening of his law office at 45 Milk Street, Boston. Mr. Hartwell is well known in the paper industry, beginning with the Crocker-McElwain Company, paper manufacturers in Holyoke, immediately after his discharge from the military forces, following the world war. In two or three years spent at the mill Mr. Hartwell worked in almost every department of manufacturing and acted as sales correspondent keeping in touch with paper merchants of the country.

Later Mr. Hartwell became New Haven Manager for the Rourke-Eno Paper Company of Hartford where he handled many accounts in the Connecticut Valley and some in New York City. When the Charles A. Esty Paper Company of Worcester opened its Boston branch with the idea in mind of specializing in high grade papers Mr. Hartwell became associated with it as manager of sales which position he retained until the Esty Paper Company merged with Carter, Rice & Co. Corporation in 1929. He has been associated with the latter firm since the merger.

Mr. Hartwell has written many articles for publications in the trade.

In February, 1930, Mr. Hartwell received the degree of LL. B. from Suffolk Law School in Boston, having maintained the second highest average standing in his class for the four year period and in November was admitted to the Massachusetts Bar.

At his office at 45 Milk Street, Boston, Mr. Hartwell will be associated with A. Van Allen Thomason and Chester C. Steadman.

New Marcy Rod Mill Bulletin

The Marcy Mill Division, Mine and Smelter Supply Company, of Denver, Col., has just issued a new bulletin pertaining to the Marcy Rod Mill and its application to the pulp and paper industry. The application of tumbling rods to the beating of paper pulp has given the paper maker an ideal equipment, for the true beating action of the rods draws out and completely separates the fibers of the various raw materials without any cutting whatever and accomplishes the result in a continuous operation. The bulletin contains valuable operating data and is profusely illustrated.

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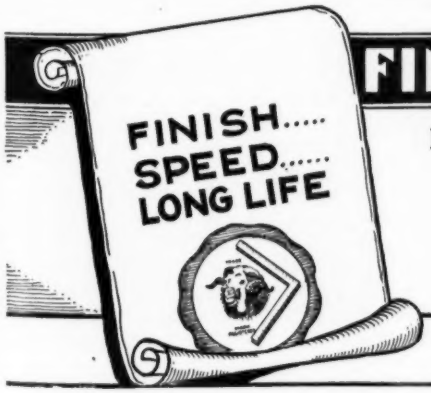

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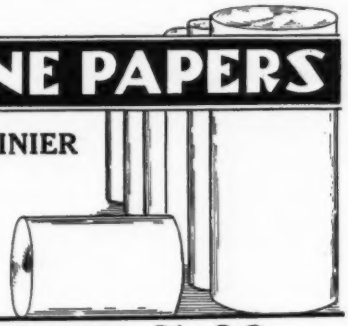

THE WATERBURY FELT CO.
SKANEATELES FALLS, N.Y.

Imports of Paper and Paper Stock

(Continued from page 52)

Amtorg Trading Corp., Carplaka, Leningrad, 3,120 cords pulpwood.

WOOD FLOUR

State Chemical Co., Volendam, Rotterdam, 750 bags.

——, Bergensfjord, Frederickstad, 101 bags.

PORTLAND, ME., IMPORTS

WEEK ENDING SEPTEMBER 5, 1931

M. Gottesman & Co., Inc., Etna, Hermosand, 4,200 bls. sulphate, 700 tons.

Brown Bros. Harriman & Co., Etna, Gefle, 5,000 bls. sulphate, 1,016 tons.

——, Etna, Gefle, 15 bls. sulpnate, 3 tons.

Stora Kopparburg Corp., Etna, Skutskar, 750 bls. wood pulp, 150 tons.

Lagerloef Trading Co., Sagoparack, Helsingfors, 1,260 bls. sulphite, 214 tons.

Lagerloef Trading Co., Sagoparack, Wiborg, 5585 bls. sulphite, 964 tons.

Lagerloef Trading Co., Sagoparack, Wiborg, 3,334 bls. sulphate, 627 tons.

M. Gottesman & Co., Inc., Sagoparack, Iggesund, 284 bls. sulphate, 56 tons.

Castle & Overton, Inc., West Eldara, Antwerp, 1,650 bls. wood pulp, 330 tons.

NEW ORLEANS IMPORTS

WEEK ENDING SEPTEMBER 5, 1930

Parsons, Whittemore, Inc., Topeka, ——, 300 bls. mechanical pulp.

BOSTON IMPORTS

WEEK ENDING SEPTEMBER 5, 1931

Lagerloef Trading Co., Sagoparack, Wiborg, 2,359 bls. sulphate, 395 tons.

Lagerloef Trading Co., Sagoparack, Wiborg, 384 bls. sulphite, 64 tons.

Parsons, Whittemore, Inc., Sagoparack, Iggesund, 250 bls. sulphate, 50 tons

Perkins Goodwin & Co., Sagoparack, Norrsundet, 5,000 bls. sulphate, 1,016 tons.

French Worsted Co., West Eldara, Antwerp, 68 paper tubes.

Darmstadt, Scott & Courtney, West Eldara, Antwerp, 433 bags glue stock.

Irving Trust Co., West Eldara, Antwerp, 25 bls. bagging.

Castle & Overton, Inc., Sac City, Rotterdam, 2,890 bls. wood pulp, 459 tons.

Atkinson Haserick & Co., Pres. Garfield, Genoa, 9 cs. paper.

Bulkley Dunton & Co., Ursula Siemers, ——, 850 bls. wood pulp.

PHILADELPHIA IMPORTS

WEEK ENDING SEPTEMBER 5, 1931

Katzenstein & Keene, Inc., Indep. Hall, Bordeaux, 35 bls. rags.

P. Berlowitz, Indep. Hall, St. Nazaire, 308 bls. linsey garments.

P. Berlowitz, Indep. Hall, St. Nazaire, 186 bls. dark cottons.

Lagerloef Trading Co., Sagoparack, Wiborg, 4,224 bls. sulphite, 705 tons.

E. J. Keller Co., Inc., West Eldara, ——, 89 bls. rags.

E. J. Keller Co., Inc., Sac City, ——, 221 bls. rags.

Castle & Overton, Inc., Sac City, Rotterdam, 500 bls. wood pulp, 86 tons.

Halle Bros., Sarcoxie, Havre, 2 cs. writing paper.

Castle & Overton, Inc., Sarcoxie, Havre, 21 bls. rags.

V. Galaup, Sarcoxie, Havre, 68 bls. rags.

Katzenstein & Keene, Inc., Sarcoxie, Dunkirk, 86 bls. rags.

S. Birkenstein & Sons, Augvald, Lisbon, 81 bls. rags.

Bank of New York & Trust Co., Augvald, Barcelona, 104 bls. rags.

Parsons & Whittemore, Inc., Ursula Siemers, ——, 300 bls. mechanical pulp.

Bulkley Dunton & Co., Ursula Siemers, ——, 750 bls. wood pulp.

BALTIMORE IMPORTS

WEEK ENDING SEPTEMBER 5, 1931

Congoleum Nairn Co., Indep. Hall, Bordeaux, 77 bls. rags.

Congoleum Nairn Co., Sac City, Rotterdam, 663 bls. dark cottons.

Parsons & Whittemore, Inc., Harburg, ——, 280 bls. sulphite.

Parsons & Whittemore, Inc., Westfalen, ——, 1,260 bls. sulphite.

Parsons & Whittemore, Inc., Westfalen, ——, 300 bls. mechanical pulp

Bulkley, Dunton & Co., Stureholm, ——, 2,000 bls. wood pulp.

Memorial to H. P. Gould

PORT LEYDEN, N. Y., September 8, 1931.—A beautiful new memorial chapel has just been completed in the local cemetery in honor of the late Henry P. Gould, founder of the Gould Paper Company at Lyon Falls. It was constructed through the generosity of Harry P. Gould, president of the company, who succeeded his father. Construction work on the structure was started last fall and it is built of marble and brick.

The late Mr. Gould was born at Lyon Falls in 1848 and was educated in the schools of that village. He embarked in business for himself in 1869 as a lumber manufacturer on the Moose River and conducted it until 1874 when he formed a partnership with Lyman R. Lyon. They acquired other interests and built up a large business.

In 1880 Mr. Gould erected a large wood pulp mill which had a capacity of several hundred tons of dry pulp yearly. He continued in this business until 1906 when the present company was organized at Lyons Falls. The company built a large paper plant and the business expanded rapidly until today it is regarded as one of the largest in Northern New York. Upon the death of Mr. Gould in 1919 the business was taken over by his son, Harry P. Gould, who is now conducting the business. The new owner now has associated with him in the business his son, Gordon P. Gould.

Sulphite Producers Reach Agreement

WASHINGTON, D. C., September 9, 1931.—An agreement for the reduction of output has been reached by the sulphite pulp producers for Sweden, Norway, Finland, Germany, Czechoslovakia, Memel, and Austria until June 30 of next year according to a report received by the Department of Commerce. The decreases will be 30 per cent during the time indicated and from July 1 to December 31, 1932 the decrease will be 15 per cent unless this is found to be insufficient in which event a larger reduction will be made looking to the stabilization of the market. A total production of 3,200,000 tons, dry weight is affected.

New Johns-Manville Officers

At the last meeting of the board of directors of the Johns-Manville Sales Corporation T. K. Mial, R. C. Harden, G. R. Lewis, J. M. Taylor and Franklin Shuey were elected vice-presidents, to have executive supervision of various territorial districts.

The districts for which these executives will be responsible are as follows:—T. K. Mial, Metropolitan, Boston, Philadelphia and New York State; R. C. Harden, Chicago, St. Louis, Northwestern and Denver; G. R. Lewis, Cleveland, Detroit, Pittsburgh and Cincinnati; J. M. Taylor, New Orleans, Atlanta and Houston, Franklin Shuey, San Francisco, Los Angeles and Seattle.

The managers of the districts are as follows:—Metropolitan E. W. Heurung; Philadelphia, J. O. Boylan; Boston, G. W. Esler, Jr.; New York State, G. R. Franklin; Cleveland, E. Dowling; Detroit, E. F. Boyle; Cincinnati, H. L. Steiner; Pittsburgh, E. W. Rosenberger; Northwestern, W. G. Wendland; Chicago, W. H. Fogarty; St. Louis, T. C. Greenwood; Denver, L. H. Inglee; Atlanta, J. H. Olden; Houston, T. E. Gossett; New Orleans, C. J. Flanagan; San Francisco, E. H. Clausen; Los Angeles, H. B. Heyn; Seattle, F. W. McDermott.

Tacoma Pulp Shipments Gain

Harbor statistics of Tacoma, Wash., show that a total of 2400 tons of pulp was shipped from the port during one week late last month, this being the largest shipment to go out from there in 1931. The next largest was a previous shipment of 1000 tons.

The steamer Sacramento of the Nelson intercoastal service sailed August 19 with 600 tons for New York and a similar tonnage was carried on the Williams steamer San Felipe. The San Marcos took 350 tons and the Point Fermin loaded 500 tons, with the last shipment going out on the freighter F. J. Luckenbach for the Middle West. This pulp is destined to reach its destination by the barge service of the Mississippi river.

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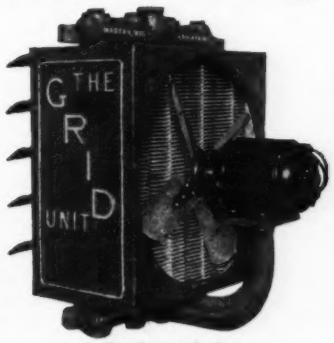

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New York City - Chicago - Boston - Philadelphia - Pittsburgh - Syracuse

New York Market Review

Office of the PAPER TRADE JOURNAL,
Wednesday, September 9, 1931.

Now that the summer holidays are drawing to a close, the local paper market is showing signs of greater activity. Demand for the various standard grades of paper should be more buoyant from now on until the end of the year, at least. Sales forces of the leading paper houses are planning a strenuous Autumn campaign. Prices remain unchanged, in most instances.

Demand for news print paper may be expected to expand materially in the near future. Advertising and circulation of the leading newspapers should grow in volume and while production in the United States and Canadian news print mills has been exceptionally light during the past few months, the output will probably have to be accelerated to meet requirements.

Some improvement is anticipated in the paper board market. Demand for box board is moderately active. The fine paper market is in a fairly satisfactory position for the time of year, although prices are considered too low. The coarse paper market is steady, with kraft wrapping moving in fair volume.

Mechanical Pulp

Trading in the ground wood market during the past week was light. However, production in North America and abroad has been curtailed somewhat and accumulations are not excessive. As a result the industry is in a sound statistical position. The contract movement is seasonal. Prices are generally holding to formerly quoted levels.

Chemical Pulp

Steadiness prevails in the chemical pulp market. The feature of the week was the continued firmness of No. 1 kraft imported pulp, which is now quoted at from $1.55 to $1.75, on dock, Atlantic ports. Shipments against contract are going forward in fairly heavy volume. Practically all the other grades of domestic and imported chemical pulp are steady.

Old Rope and Bagging

Paper mill demand for old rope was somewhat restricted. While the prevailing demand for domestic and foreign old manila rope is light, however, offerings are not believed excessive. Small mixed rope is moving in fair volume. The bagging market is irregular. Scrap is in satisfactory request but gunny and burlap are dull. No radical price changes have been recorded.

Rags

Although the domestic rag market continues quiet there is a brisk seasonal demand for roofing stock. As offerings of this grade are rather scarce at present, prices are inclined to become firmer. Most of the grades of cotton cuttings are only moderately active. Mixed rags are fairly steady. The imported rag market continues dull.

Waste Paper

The recent improvement in the paper stock market is well maintained. Board mill demand for the lower grades is persistent, especially for mixed papers and strictly folded news. Over-issue news is also arousing more attention. The better grades of waste paper are fairly steady. Book stock is moderately active. Prices are generally steady to firm.

Twine

During the past week sales of the various grades of twine were again equal to sales in the corresponding period of the preceding year. There are a satisfactory number of inquiries around, some of which will, no doubt, materialize into good business. On the whole the outlook for the twine industry in the near future is bright.

Bids for Sale of Colorado Paper Co.

The Colorado Pulp and Paper Company of Denver, Colorado, long in receivership has been placed in the limelight again, bids for the purchase of the property were opened September 1.

Charles B. Myers who built the mill offered to exchange 138,565 shares of preferred stock in the original company, together with interest and accumulated dividends, for the remaining assets of the firm.

The Colorado Paper Products Company offered to take over the assets of the company by exchanging $200,000 in bonds of the original company. It is at present operating the property, with M. Binstock as president. On January 14, the state supreme court canceled the sale made by the Receiver George W. Beck, took the handling of the case out of the hands of Judge Samuel W. Johnson and transferred the case to the district court, division of Judge E. V. Holland, ordering Judge Holland to sell the property but to keep in mind the value and the claims of the creditors. Judge Holland appointed F. D. Stackhouse, master in chancery and the result of their efforts is as reported herein.

The mill is only a few years old, was equipped with new machinery, is located with spur tracks to the different railroads which enter Denver, has access to ample water and should prove a success to any practical paper men, and is easily worth more than $200,000.

The original trouble, so it is asserted, was due to the cost of building the plant, the cost running far above the estimated cost and an early receivership resulted and from that day, with little exception, there has been some kind of trouble, most of it man-handling and a failure for the parties to cooperate. Had there been a full fair and square cooperation this mill should and would have had a large market and a money maker, for it is well known that there are no paper mills close by and Colorado has timber practically unlimited and many tons of waste paper.

No action was taken relative to the latest bids.

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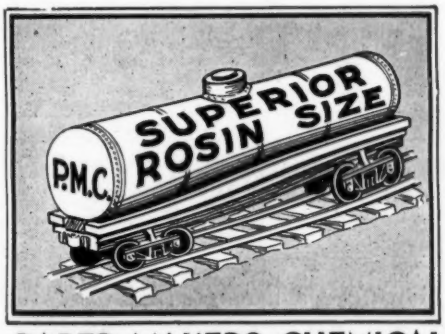

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Miscellaneous Markets

Office of the PAPER TRADE JOURNAL,
Wednesday, September 9, 1931.

BLANC FIXE.—Trading in the blanc fixe market was moderately active during the past week. Prices remain unchanged. The pulp is quoted at from $42.50 to $45.00 per ton, while the powder is selling at from 3¾ cents to 4½ cents per pound, in barrels, at works.

BLEACHING POWDER.—The bleaching powder market is quiet at present. Shipments against contract are going forward in fair volume. Prices remain unchanged. Bleaching powder is quoted at from $1.75 to $2.00 per 100 pounds, in drums, at works.

CASEIN.—The casein market continues dull. Domestic standard ground is still quoted at 6 cents and finely ground at 7½ cents per pound. Argentine standard ground is selling at 8½ cents and finely ground at 9½ cents per pound, all in bags, car lot quantities.

CAUSTIC SODA.—Conditions in the caustic soda market are practically unchanged. Prices are steady. Solid caustic soda is quoted at from $2.50 to $2.55; while the flake and the ground are selling at from $2.90 to $2.95 per 100 pounds, in large drums, at works.

CHINA CLAY.—The china clay market is fairly active. The contract movement is seasonal. Prices remain unchanged. Imported china clay is quoted at from $13 to $21 per ton, ship side; while domestic paper making clay is selling at from $7 to $11 per ton, at mine.

CHLORINE.—Steadiness prevails in the chlorine market. Contract shipments are moving in fairly heavy volume. Prices are holding to schedule. Chlorine is quoted at $1.75 per 100 pounds, in tanks, or multi-unit cars, in ton lots, or over, at works.

ROSIN.—The rosin market continues unchanged. The grades of gum rosin used in the paper mills are quoted at from $4.10 to $4.25 per 280 pounds, in barrels, at works. Wood rosin is selling at $3.70 per 280 pounds, in barrels, on dock, car lot quantities.

SALT CAKE.—Demand for salt cake is fairly persistent. Prices are steady and unchanged. Salt cake is quoted at from $16 to $17 and chrome salt cake at from $14 to $15 per ton, in bulk, at works. Foreign salt cake is selling at from $15 to $15.50 per ton, ship side.

SODA ASH.—The soda ash market is in a fairly satisfactory position. Shipments against contract are moving with regularity. Quotations on soda ash, in car lots, at works, per 100 pounds, are as follows: in bulk, $1.00; in bags, $1.25; and in barrels, $1.38.

STARCH.—The starch market is exhibiting a strong undertone. Supplies are going forward to the paper mills at a steady pace. Prices remain unchanged. Special paper making starch is quoted at $2.67, in bags; and at $2.94 per 100 pounds, in barrels, at works.

SULPHATE OF ALUMINA.—Most of the business transacted in the sulphate of alumina market was along routine lines. Commercial grades are quoted at from $1.25 to $1.40, while iron free is selling at from $1.90 to $2.05 per 100 pounds, in barrels, at works.

SULPHUR.—The sulphur market is dull at present. Sulphur is quoted at $18 per long ton on orders of 1,000 tons, or over, on yearly contracts; and at $20 per ton for any smaller quantity over that period. On spot and near by car loads, the quotation is $21 per ton.

TALC.—Business in the talc market is moderately active. Supplies are moving into consumption in fair volume. Prices remain unaltered. Domestic talc is quoted at from $16 to $18 per ton, in bulk; while imported talc is selling at from $18 to $22 per ton, ship side.

Market Quotations

Paper

(F. o. b. Mill)

Ledgers	11.00	@	38.00
Bonds	6.75	@	53.25
Writings—			
Extra Superfine	14.00	@	32.00
Superfine	14.00	@	32.00
Tub sized	10.00	@	15.00
Engine sized	6.75	@	11.00
Book, Cased—			
S. & S. C.	5.25	@	—
M. F.	5.00	@	—
Coated and Enamel	6.75	@	10.25
Lithograph	7.25	@	11.75
Tissues—Per Ream—			
White No. 1	.65	@	.70
Anti-Tarnish M. G. only	.65	@	.70
Colored	.70	@	.90
White No. 2	.55	@	.60
Kraft	.65	@	.70
Manila	.55	@	.60
Manila—			
No. 1 Jute	9.00	@	9.25
No. 2 Jute	7.75	@	8.50
No. 1 Wood	4.00	@	5.25
No. 2 Wood	3.50	@	4.00
Butchers	3.37½	@	—
Fibre Papers—			
No. 1 Fibre	4.25	@	5.50
No. 2 Fibre	4.00	@	4.75
Common Bogus	1.50	@	3.00
Screenings	2.00	@	3.00
Card Middles	4.00	@	5.00
Glassine—			
Bleached, basis 25 lbs., No. 1	.09¼	@	—
No. 2	.11¼	@	—
Bleached, basis 20 lbs.	.11¼	@	—
(Delivered New York)			
News, per ton—			
Rolls, contract	57.00	@	—
Rolls, spot	57.00	@	—
Sheets	62.00	@	—
Side Runs	42.00	@	46.00
Kraft—			
No. 1 Domestic	4.50	@	5.75
No. 2 Domestic	4.00	@	4.50
Southern	3.45	@	4.25
Imported	6.00	@	7.00
Boards—per ton—			
News	26.00	@	27.50
Straw	34.50	@	45.00
Chip	26.00	@	27.50
Binders' Boards	65.00	@	70.00
Standard 85 Test Liner	32.50	@	35.00
Sgl. Mla. Ll. Chip	37.50	@	42.50
(F. o. b. Mill)			
Wood Pulp Boards	70.00	@	80.00

Mechanical Pulp

(On Dock)

No. 1 Imported—			
Moist	24.00	@	28.00
Dry	26.00	@	28.00
(F. o. b. Mill)			
No. 1 Domestic	25.00	@	30.00

Chemical Pulp

(On Dock, Atlantic Ports)

Sulphite (Imported)—			
Bleached	2.50	@	3.50
Easy Bleaching	2.10	@	2.25
No. 1 strong unbleached	1.90	@	2.25
Mitscherlich unbleached	1.90	@	2.10
No. 2 strong unbleached	1.70	@	1.80
No. 1 Kraft	1.55	@	1.75
No. 2 Kraft	1.40	@	1.50
Sulphate—			
Bleached	2.75	@	3.25
(F. o. b. Pulp Mill)			
Sulphite (Domestic)—			
Bleached	2.25	@	4.75
Easy Bleaching	2.50	@	2.75
News	1.80	@	2.50
Mitscherlich	2.40	@	3.00
Kraft (Domestic)	1.60	@	2.75
(Delivered Paper Mills)			
Soda Bleached	3.00	@	—

Domestic Rags

New Rags

(Prices to Mill f. o. b. N. Y.)

Shirt Cuttings—			
New White, No. 1	6.50	@	7.00
New White, No. 2	5.50	@	6.00
Silesias No. 1	5.25	@	5.50
New Unbleached	7.00	@	7.50
New Blue Prints	4.00	@	4.50
New Soft Blacks	3.50	@	4.00
Blue Overall	5.00	@	5.25
Fancy	3.00	@	3.50
Washables	2.75	@	3.00
Mixed Khaki Cuttings	3.50	@	4.00
Pink Corset Cuttings	5.00	@	5.50
O. D. Khaki Cuttings	4.50	@	4.75
Men's Corduroy	3.00	@	3.50
New Mixed Blacks	3.00	@	3.25

Old Rags

White, No. 1—			
Repacked	5.25	@	5.75
Miscellaneous	4.25	@	4.75
White, No. 2—			
Repacked	3.00	@	3.50
Miscellaneous	2.30	@	2.50
St. Soiled, White	1.50	@	1.75
Thirds and Blues—			
Repacked	2.25	@	2.50
Miscellaneous	1.65	@	1.85
Black Stockings	3.25	@	3.75
Roofing Rags—			
Cloth Strippings	1.25	@	1.30
No. 1	1.25	@	1.30
No. 2	.90	@	1.00
No. 3	.70	@	.80
No. 4	.65	@	.70
No. 5A	.50	@	.60

Foreign Rags

New Rags

New Dark Cuttings	2.00	@	2.15
New Mixed Cuttings	2.10	@	2.40
New Light Silesias	5.00	@	5.38
Light Flannelettes	5.00	@	5.25
Unbleached Cuttings	6.50	@	6.75
New White Cuttings	6.00	@	6.25
New Light Oxfords	5.00	@	5.50
New Light Prints	3.10	@	3.25

Old Rags

No. 1 White Linens	6.25	@	6.50
No. 2 White Linens	5.25	@	5.50
No. 3 White Linens	3.75	@	4.25
No. 4 White Linens	2.25	@	2.75
No. 1 White Cotton	4.50	@	5.00
No. 2 White Cotton	3.50	@	4.25
No. 3 White Cotton	2.50	@	3.25
No. 4 White Cotton	1.50	@	1.75
Extra Light Prints	1.90	@	2.10
Ord. Light Prints	1.75	@	1.90
Med. Light Prints	1.40	@	1.55
Dutch Blue Cottons	1.50	@	1.60
French Blue Linens	2.25	@	2.40
German Blue Linens	2.00	@	2.10
German Blue Cottons	1.35	@	1.40
Checks and Blues	1.40	@	1.45
Lindsay Garments	.90	@	1.00
Dark Cottons	.70	@	.75
Old Shopperies	.65	@	.70
New Shopperies	.60	@	.65
French Blues	1.40	@	1.50

Old Rope and Bagging

(Prices to Mill f. o. b. N. Y.)

Gunny No. 1—			
Foreign	1.55	@	1.65
Domestic	1.65	@	1.80
Wool Tares, light	1.15	@	1.20
Wool Tares, heavy	1.15	@	1.20
Bright Bagging	1.10	@	1.15
Small Mixed Rope	.90	@	1.00
Manila Rope—			
Foreign	1.75	@	1.85
Domestic	1.90	@	2.00
New Burlap Cut	1.70	@	1.80
Hessian Jute Threads—			
Foreign	2.60	@	2.75
Domestic	2.80	@	3.00

Old Waste Papers

(F. o. b. New York)

Shavings—			
Hard, white, No. 1	2.65	@	2.85
Hard, white, No. 2	2.10	@	2.20
Soft, white, No. 1	2.10	@	2.20
White envelope cuttings	2.35	@	2.50
Flat Stock—			
Stitchless	.70	@	.80
Overissue Mag	.70	@	.80
Solid Flat Book	.60	@	.70
Crumpled No. 1	.48	@	.53
Solid Book Ledger	1.75	@	1.85
Ledger Stock	.65	@	.75
New B. B. Chips	.20	@	.30
Manilas—			
New Env. Cut	1.75	@	1.85
New Cuttings	1.40	@	1.50
Extra No. 1 old	1.10	@	1.25
Print	.45	@	.50
Bogus Wrapper	.45	@	.50
Container	.30	@	.35
Old Kraft Machine—			
Compressed bales	1.20	@	1.30
News—			
No. 1 White News	1.60	@	1.65
Strictly Overissue	.35	@	.45
Strictly Folded	.30	@	.35
No. 1 Mixed Paper	.25	@	.30
Common Paper			Nominal

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Twines

(F. o. b. Mill)

Cotton—			
B. C., 18 basis	.30	@	.32
No. 1	.20	@	.22
No. 2	.19	@	.20
No. 3	.17	@	.18
A. Italian, 18 basis	.36	@	.37
Finished Jute—			
Dark, 18 basis	.18	@	.20
Light, 18 basis	.20	@	.22
Jute Wrapping, 3-6 Ply—			
No. 1	.13	@	—
No. 2	.11	@	—
Tube Rope—			
4-ply and larger	.09	@	—
Fine Tube Rope—			
4-ply	.11	@	—
3-ply	.12	@	—
2-ply	.13	@	—
Paper Makers Twine Balls	.07	@	—
Box Twine, 2-3 ply	.07	@	.08
Jute Rope	.09	@	.10
Amer. Hemp, 6	.27	@	.29
Java Sisal—			
No. 1 Basis	.10	@	—
No. 2 Basis	.09	@	—
New Zealand Sisal	.10	@	—
Sisal Lath Yarn—			
No. 1	.12	@	.14
No. 2	.10	@	.12
Manila Twine	.21	@	.22

CHICAGO

Paper

(F. o. b. Mill)

Rag Bond	.30	@	.53¼
Water Marked Sulphite Bond	.09	@	.12
Sulphite Bond	.06¼	@	.11
Superfine Writing	.18	@	.24
No. 1 Fine Writing	.14	@	.18
No. 2 Fine Writing	.12	@	.14
No. 3 Fine Writing	.08½	@	.12
No. 1 M. F. Book	.06½	@	.07¼
No. 2 M. F. Book	.05¼	@	.06¼
No. 1 S.&S.C. Book	.06¾	@	.07¾
No. 2 S.&S.C. Book	.05¾	@	.06½
Coated Book	.07½	@	.12
Coated Label	.07½	@	.10
No. 1 Manila	.04¼	@	.05¾
No. 1 Fibre	.04¼	@	.05¼
No. 2 Manila	.04¼	@	.04¾
Butcher's Manila	.04	@	.04½
No. 1 Kraft	5.00	@	5.50
Southern Kraft	3.75	@	4.00
No. 2 Kraft	3.75	@	4.00
Wood Tag Boards	.04¼	@	.06¼
Sulphite Screenings	.03	@	.03¼
Manila Tissue	.07	@	.07¼
White Tissue	.07¼	@	.07½
(Delivered Central Territory)			
News, per ton—			
Rolls, contract	57.00	@	—
Sheets	62.00	@	—
Boards, per ton—			
Plain Chip	30.00	@	35.00
Solid News	32.50	@	37.50
Manila Lined Chip	40.00	@	45.00
Container Lined—			
85 Test	50.00	@	55.00
100 Test	55.00	@	60.00

Old Papers

(F. o. b. Chicago)

Shavings—			
No. 1 Hard White	2.35	@	2.40
White Env. Cuttings	—	@	—
No. 1 Soft Shavings	2.10	@	2.15
Ledger & Writings	.70	@	.75
Solid Books	.75	@	.80
Blanks	1.60	@	1.65
Krafts	1.25	@	1.35
New Kraft Cuts	1.35	@	1.45
Manila Env. Cuts	1.50	@	1.55
Ex. No. 1 Manila	1.25	@	1.30
Print Manila	.40	@	.45
Overissue News	.40	@	.45
Old Newspapers—			
No. 1	.35	@	.40
No. 2	.30	@	.35
Mixed Papers—			
No. 1	.28	@	.30
No. 2	.20	@	.25
Roofing Stocks—			
No. 1	30.00	@	—
No. 2	28.00	@	—

PHILADELPHIA

Paper

(F. o. b. Mill)

Bonds	.05	@	.40
Ledgers	.07	@	.40
Writings—			
Superfine	.12	@	.18
Extra fine	.16	@	.22
Fine	.15	@	.26
Fine, No. 2	.12	@	.25
Fine, No. 3	.07	@	.20
Book, M. F.	.04¾	@	.07
Book, S. S. & C.	.05	@	.07½
Book, Coated	.07	@	.16
Coated Lithograph	.06	@	.11
Label	.07	@	.11
No. 1 Jute Manila	.07	@	.09
Manila Sul., No. 1	.03¼	@	.05½
Manila No. 2	.03	@	.04
No. 1 Kraft	.05¼	@	.06
No. 2 Kraft	.03¾	@	.04¼
Southern Kraft No. 1	—	@	.04
Southern Kraft No. 2	—	@	.03¾
Common Bogus	.03	@	.04
(Delivered Philadelphia)			
News Print Rolls	58.00	@	62.00
Straw Board	50.00	@	—
News Board	29.00	@	30.00
Chip Board	25.00	@	27.50
Wood Pulp Board	85.00	@	95.00
Binder Boards—			
No. 1, per ton	75.00	@	—
No. 2, per ton	66.00	@	—
Carload lots	62.00	@	67.00
Tarred Felts—			
Regular	52.25	@	54.25
Slaters (per roll)	.84	@	.94
Best Tarred, 1-ply (per roll)	1.95	@	2.10
Best Tarred, 2-ply (per roll)	1.50	@	1.60
Best Tarred, 3-ply	2.00	@	2.25

Domestic Rags (New)

(Price to Mill, f. o. b. Phila.)

Shirt Cuttings—			
New White, No. 1	.06	@	.06½
New White, No. 2	.05	@	.05½
Light Silesias	.05	@	.05½
Silesias, No. 1	.06	@	.08
Black Silesias, soft	.05	@	—
New Unbleached	.06	@	.06½
Washable, No. 1	.02½	@	.03
Blue Overall	.05	@	.05½
Cottons—According to grades—			
Washable, No. 2	.02	@	.02½
New Blue	.02	@	.02½
Fancy	.03	@	.03¼
New Black Soft	.03	@	.03½
New Light Seconds	.01¾	@	.02
New Dark Seconds	1.85	@	2.00
Khaki Cuttings—			
No. 1 O. D.	.04½	@	.05
No. 2 Mixed	.03½	@	.04
Corduroy	.02½	@	.03
New Canvas	.06½	@	.07
New Black Mixed	.03	@	.03½

Domestic Rags (Old)

White No. 1—			
Repacked	3.50	@	4.00
Miscellaneous	2.25	@	2.75
M. G.	4.50	@	—
Thirds and Blues—			
Miscellaneous	1.25	@	1.50
Repacked	1.75	@	2.00
Black Stockings (Export)	3.80	@	4.00
Roofing Stock—			
Foreign No. 1	1.15	@	1.25
Repacked	.80	@	.90

Bagging

(F. o. b. Phila.)

Gunny, No. 1—			
Foreign	1.50	@	1.60
Domestic	1.75	@	—
Manila Rope	2.25	@	2.50
Sisal Rope	1.25	@	1.50
Mixed Rope	1.10	@	1.25
Scrap Burlaps—			
No. 1	1.50	@	1.60
No. 2	1.10	@	1.20
Wool Tares, heavy	3.00	@	—
Mixed Strings	1.15	@	1.25
No. 1 New Light Burlap	2.50	@	2.75
New Burlap Cuttings	2.00	@	2.25

Old Papers

(F. o. b. Phila.)

Shavings—			
No. 1 Hard White	2.30	@	2.50
No. 2 Hard White	2.00	@	2.25
No. 1 Soft White	1.75	@	2.00
No. 2 Soft White	1.40	@	1.50
No. 1 Mixed	.75	@	.80
No. 2 Mixed	.50	@	.55
Solid Ledger Stock	1.35	@	1.40
Writing Paper	.80	@	1.00
No. 1 Books, heavy	.70	@	.75
No. 2 Books, light	Normal		
No. 1 New Manila	1.60	@	1.75
No. 1 Old Manila	1.25	@	1.30
Print Manila	.50	@	.55
Container Manila	.40	@	.45
Old Kraft	1.10	@	1.20
Common Paper	.30	@	.40
No. 1 Mixed Paper	.35	@	.45
Straw Board, Chip	.35	@	.45
Binders Board, Chip	.35	@	.45
Corrugated Board	.45	@	.50
Overissue News	.50	@	.55
Old Newspaper	.30	@	.35

BOSTON

Paper

(F. o. b. Mill)

Ledgers—			
Sulphite	.07½	@	.12½
Rag Content	.15	@	.30
All Rag	.38	@	.52½
Bonds—			
Sulphite	.06½	@	.11¾
Rag content	.15	@	.30
All rag	.36½	@	.65
Writings	.06½	@	.20
Superfines	.06	@	.31
Book, Super	.06	@	.09
Book, M. F.	.05½	@	.08½
Book, Coated	.08½	@	.18
Coated Litho	.09	@	.12
Label	.09½	@	.15
Jute Manila No. 1	.11	@	.13
Manila, Sul. No. 1	.04¾	@	.06½
Manila, Sul. No. 2	.03¾	@	.04½
No. 1 Kraft	.04½	@	.05½
No. 2 Kraft	.03¾	@	.04½
(F. o. b. Boston)			
Southern Kraft	.03¾	@	.04
(F. o. b. destination in carload lots, f. o. b. mill in less than carload lots.)			
Common Bogus	.02	@	.02¾
(Delivered New England points)			
News Print, rolls	—	@	56.50
Straw Board, rolls	.009	@	52.50
Straw Board in Sheets, basis 35s to 70s	—	@	50.00
Filled News Board	27.50	@	30.00
Chip Board	27.50	@	—
Chip Board (Creasing)	27.50	@	30.00
Single Manila Lined Chip	40.00	@	45.00
Single White, Patent Coated News Board—Binder	52.50	@	60.00
Wood Pulp Board	70.00	@	75.00
Binder Boards	67.50	@	75.00

Old Papers

(F. o. b. Boston)

Shavings—			
No. 1 Hard White	2.75	@	3.50
No. 2 Hard White	2.25	@	2.50
No. 1 Soft White	1.90	@	2.10
No. 2 Mixed	.60	@	.65
No. 1 Mixed	.90	@	1.00
Solid Ledger Books	1.75	@	2.00
Overissue Ledger Stock	1.35	@	1.60
Mixed Ledgers	1.15	@	1.30
No. 1 Books, heavy	.60	@	.65
No. 1 Books, light	—	@	.45
Crumpled Stitchless Book Stock	1.00	@	1.25
Manila Env. Cuttings	1.85	@	2.00
No. 1 Old Manila	—	@	1.00
White Blank News	1.45	@	1.55
Kraft No. 1	—	@	1.25
Manila	.80	@	.90
No. 1 Mixed Paper	.20	@	.25
Print Manila	.35	@	.40
Overissue News	—	@	.40
Old Newspapers	.25	@	.30
Box Board, Chip	.16	@	.20
Corrugated Boxes	.35	@	.45

Bagging

(F. o. b. Boston)

Gunny No. 1—			
Foreign	1.55	@	—
Domestic	1.50	@	—
Manila Rope—			
Foreign	1.50	@	1.75
Domestic	1.75	@	2.00
Transmission Rope	1.25	@	1.40
Mixed String	.50	@	.55
Jute Rope	1.00	@	1.15
Jute Carpet Threads	.75	@	.90
Bleachery Burlap	2.50	@	2.75
No. 1 Scrap Burlap	1.10	@	1.25
Scrap Sisal	1.35	@	1.45
Scrap Sisal for shredding	1.50	@	1.60
Wool Tares, heavy	1.25	@	1.30
New Burlap Cutting	1.50	@	1.25
Australian Pouches	2.00	@	2.25
Heavy Baling Bagging	1.50	@	1.60
Paper Mill Bagging	.90	@	1.05
Bagging No. 2	.50	@	—
No. 1 Burlap	—	@	3.50

Domestic Rags (New)

(F. o. b. Boston)

Shirt Cuttings—			
New White No. 1	.06½	@	.07
New White No. 2	—	@	.06
Silesias No. 1	.06	@	.06¼
New Black Silesias	.02½	@	.02¾
New Unbleached	—	@	.08
Fancy	.04	@	.04½
Washable	.04	@	.04½
Cottons—According to grades—			
Blue Overalls	.05	@	.06
New Black, soft	.04	@	.04¼
Khaki Cuttings	.04	@	.04½
O. D. Khaki	.04½	@	.05
Corduroy	.03	@	.03¼
New Canvas	.08	@	.08¼

Domestic Rags (Old)

(F. o. b. Boston)

Canvas	.04½	@	—
White No. 1—			
Repacked	4.75	@	5.25
Miscellaneous	—	@	4.00
White No. 2—			
Repacked	.04½	@	.05
Miscellaneous	.03½	@	.04
Twos and Blues	2.50	@	2.75
Thirds and Blues—			
Repacked	1.60	@	1.80
Miscellaneous	1.00	@	1.20
Black Stockings	3.25	@	3.50
Roofing Stock—			
No. 1	—	@	.63
No. 2	—	@	.58
No. 3	—	@	.53

Foreign Rags

(F. o. b. Boston)

Dark Cottons	—	@	.70
New No. 1 White Shirt Cuttings	6.50	@	6.75
Dutch Blues	—	@	1.80
New Checks & Blues	4.00	@	4.50
Old Fustians	1.55	@	1.65
Old Linsey Garments	.80	@	.90

TORONTO

Paper

(F. o. b. Mill)

Bond—			
No. 1 Sulphite	.10¾	@	—
No. 2 Sulphite	08½	@	—
No. 1 Colored	.11¾	@	—
No. 2 Colored	.09	@	.10½
Ledgers (sulphite)	—	@	—
Ledgers, No. 1	.36	@	—
Ledgers, No. 2	.27	@	—
Writing	.09½	@	.10
Book—			
No. 1 M. F. (carloads)	6.65	@	—
No. 3 M. F. (carloads)	6.20	@	—
No. 1 S. C. (carloads)	7.15	@	—
No. 3 S. C. (carloads)	6.65	@	—
No. 4 S. C. (carloads)	5.70	@	—
No. 1 Coated and Litho	12.50	@	—
No. 2 Coated and Litho	11.50	@	—
No. 3 Coated and Litho	10.00	@	11.50
Coated tinted	14.00	@	—
Wrapping—			
Rag Brown	4.95	@	—
White Wrap	5.25	@	—
"B" Manila	5.00	@	—
No. 1 Manila	5.40	@	—
Fiber	5.40	@	—
Kraft, M. F.	5.90	@	—
Kraft No. 2	5.40	@	—

(Delivered Toronto)

News, per ton—			
Rolls (contract)	56.50	@	57.00
Sheets	61.50	@	—

Pulp

(F. o. b. Mill)

Ground Wood	30.00	@	32.00
Sulphite easy bleaching	50.00	@	—
Sulphite, news grade	44.00	@	—
Sulphite, bleached	62.50	@	75.00
Sulphate	60.00	@	—

Old Waste Paper

(In carload lots, f. o. b. Toronto)

Shavings—			
White Env. Cut	2.80	@	—
Soft White	2.60	@	—
White Blk. News	1.50	@	—
Book and Ledger—Flat Magazine and Book Stock (old)	1.10	@	—
Light and Crumpled Book Stock	1.20	@	—
Ledgers and Writings	—	@	—
Manilas—			
New Manila Cut	1.50	@	—
Printed Manilas	.80	@	—
Kraft	1.90	@	—
News and Scrap—			
Strictly Overissue	.70	@	—
Strictly Folded	.70	@	—
No. 1 Mixed Paper	.60	@	—

Domestic Rags

(Price to mills, f. o. b. Toronto)

No. 1 White Shirt Cuttings	.09½	@	.10
Fancy Shirt Cuttings	.06	@	.06¾

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ESTABLISHED 1872

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY AND THE PIONEER PUBLICATION IN ITS FIELD

SIXTIETH YEAR

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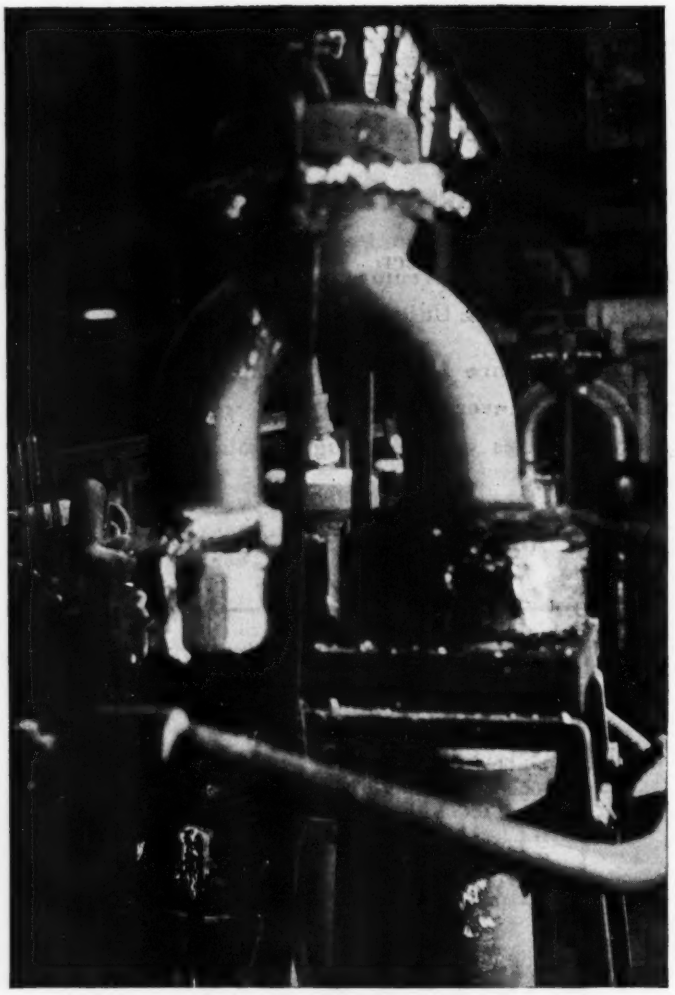

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